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# Contemporary Projections of Utah's Population Portend Relatively Small Increases in Higher Education Enrollments

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## Introduction

Remarkable changes have come about in the dynamics of growth in Utah's population from the very expansionary decade of the 1970's. Between 1970 and 1980 the number of Utahns born per year expanded from 27,000 to nearly 42,000, while annual deaths increased only from 7,000 to 8,103. Utah births of 327,759 during the decade minus deaths of 75,264 contributed a quarter of a million to the 1970 census population of 1,059,273. However, the 1,461,037 Utah residents included in the 1980 census amounted to roughly 150,000 more than the decade's natural increase of 252,495, for an imputed net in-migration over the period equivalent to 14.2 percent of the 1970 population.

In 1980, the excess of births over deaths was expanding the Utah population at a rate of 2.3 percent per year while net in-migration was contributing an additional 10,000 to 20,000 each year, depending on the flux in employment and economic conditions. By 1985 decreasing fertility rates and changing age composition had dropped the natural rate of increase to less than 1.8 percent per year and slowly expanding employment opportunities were contributing to net out-migration that was subtracting 7,000 to 8,000 per year from the Utah population[1]. Very substantial disparities in the sizes of possible future populations are implied by these differences in patterns of change. The 1980 processes of expansion (2.3 percent per year) applied for five years to the 1985 Utah population of 1.645 million persons would, for 1990, yield something like 1,918,000. The 1985 pattern of change, extended for five years (1.8 percent per year), generates 1,757,000 for the 1990 population. A difference in populations of 161,000 in only this short of a horizon, in general, has major implications for both the weight of the burdens placed on society and the capability of the economy to bear the loads.

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[1] These observations and calculations are based on data found in "1986 Population Estimates for Utah" by Brad T. Barber and Jeanine M. Taylor, Utah Economic and Business Review, Vol. 46, No. 12, Bureau of Economic
Business Research, University of Utah (Salt Lake City,

General descriptions of the overall size of a population are quite inadequate for analysis when the burdens and capabilities are those of programs or institutions serving a particular segment of society. Elementary education is a notable case where the high birth numbers of five to ten years ago are now being imposed on the Utah school system even though the numbers of new first graders will be falling sharply in the next few years. Obviously, the important tasks of projecting elementary and secondary enrollments are complicated. But, as higher education serves a wider segment of society, in turn with fluctuating demands for service, the projection of university and college enrollments is far more difficult than projecting the relatively lock-stepped populations served in elementary and secondary education.

This article does not attempt a comprehensive projection of demands for future service across the Utah system of higher education. Rather, it is intended to provide a sketch of a plausible future of enrollments in a central block of the Utah system with an additional objective of demonstrating the utility of employing the disaggregated age-and sex-specific projections of the State of Utah's Office of Planning and Budget in this fashion.

## The 1987 Baseline Projection

The population projections by gender and by single year of age embody in simple tables the consequences of multitudes of calculations performed on numerous judgments and analytical inputs. The procedures and assumptions employed in the "Baseline" series used here are described in the report 1987 Baseline Projections[2] which also contains the following brief summary of the nature of the projection.

> This projection is called Baseline 1987. A baseline projection reflects the future based on the existing economic structure of the area and the changing demographic characteristics of the population. The baseline is not a prediction or forecast of the future, but rather an attempt to depict the direction current trends are likely to take without major changes in the economic base. For example, Baseline 1987 does not assume synfuels development will occur, nor projects like the nuclear waste repository in Southeastern Utah. On the other hand, the current projections have taken into consideration the reopening schedule of Kennecott. Also it is assumed that Geneva Steel will not reopen during the projection period. Alternative projections which assume major changes in the economic base may be compared to the baseline projection to determine their impact. ...[3]

The broad implications of the baseline assumptions for the size of Utah's population are displayed in Table 1. The age groups selected for Table 1 were intended to focus attention on the 18 to 24 year-olds traditionally thought to be the college-attending ages, but it should be kept in mind that the analysis of enrollments was performed with the single year of age- and sex-specific detail provided by the projection report. (It will further be developed that some of the complexities encompassing enrollment projections are being caused by departures from "traditional ages of attendance.")

Utah's system of education was subjected to very consequential cross-currents of population change in just the five years between 1980 and 1985. Much of the present day concern with elementary school enrollments understandably arises because of the concentration in a narrow age band of the nearly 70,000 increase in population under the age of 18. Perhaps surprisingly, the 13,000 decrease shown in Table 1 for persons 18 through 24 between 1980 and 1985 was associated with an increase from 39,617 to 46,783 in the autumn headcount[4] of resident enrollments at Utah's public universities and four year colleges (University of Utah, Utah State University, Weber State College, and Southern Utah State College). The possibility is apparent that the enrollment increase may be related to the nearly 40,000 increase in those of ages 25 through 34. Clearly, more detailed data than these for the broad age groups must be examined, but it is useful to consider the trends over time in the broad age groups described in Table 2.

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[2] Utah Office of Planning and Budget, 1987 Baseline Projections, Salt Lake City, Utah April 1987.

[3] 1987 Baseline Projections, page 2.

[4] Headcounts accumulated for Fall, 1980, and Fall, 1985 from Utah System of Higher Education 1987-88 Data Book, Office of the Commissioner of Higher Education, January 1987, pages 7, 10, 13 and 16.

Table 1
Utah Population by Broad Age Groups
1980 - 2010
(thousands of persons)

| Ages/Year | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 |
|---|---|---|---|---|---|---|---|
| 0-17 | 540.105 | 609.4 | 634.0 | 643.6 | 630.5 | 659.2 | 731.9 |
| 18-24 | 216.304 | 203.2 | 204.5 | 229.2 | 264.9 | 267.0 | 261.9 |
| 25-34 | 240.775 | 279.4 | 285.1 | 275.2 | 279.3 | 331.9 | 398.9 |
| 35-44 | 142.806 | 185.3 | 234.7 | 271.9 | 277.0 | 270.6 | 294.4 |
| 45-64 | 211.827 | 223.4 | 246.7 | 293.5 | 359.8 | 436.6 | 506.8 |
| 65+ | 109.220 | 139.9 | 168.6 | 190.6 | 204.7 | 221.0 | 249.7 |
| Total | 1,461.037 | 1,640.6 | 1,773.5 | 1,904.0 | 2,016.2 | 2,186.4 | 2,443.5 |

Sources: 1980: Bureau of the Census, Census of Population, General Population Characteristics, Utah, PC 80-1-B46;
Estimates and Projections for Other Years; 1987 Baseline Projections. Utah Office of Planning and Budget, Salt Lake City, Utah (April 1987).

Table 2
Projected Relative Size of the Utah Population
at Five-Year Intervals by Broad Age Groups

| | Relatives: | | | | | |
|---|---|---|---|---|---|---|
| Ages | 1985 to 1980 | 1990 to 1985 | 1995 to 1990 | 2000 to 1995 | 2005 to 2000 | 2010 to 2005 |
| 0-17 | 1.128 | 1.040 | 1.015 | 0.980 | 1.045 | 1.110 |
| 18-24 | 0.940 | 1.006 | 1.121 | 1.155 | 1.008 | 0.981 |
| 25-34 | 1.161 | 1.020 | 0.965 | 1.015 | 1.188 | 1.202 |
| 35-44 | 1.298 | 1.266 | 1.159 | 1.019 | 0.977 | 1.088 |
| 45-64 | 1.055 | 1.104 | 1.190 | 1.226 | 1.214 | 1.161 |
| 65+ | 1.281 | 1.205 | 1.131 | 1.074 | 1.080 | 1.130 |
| All Ages | 1.123 | 1.081 | 1.074 | 1.059 | 1.084 | 1.118 |

Source: Calculated from data presented in Table 1.

Table 2 describes the trends as relative changes over five-year intervals. Persons ages 18 through 24 were estimated in 1985 to be 94 percent of the population 18 through 24 in 1980. Moving to the right in the same row reveals a value of 1.006 for 1990 over 1985; that is, the number of Utahns of ages 18 through 24 is projected to be only 6/10 of 1 percent larger in 1990 than in 1985. The decade of the 1990s displays the period of expected rapid increase in this age group with more than a 12 percent increase shown for the first five years, which then increases further to an expansion by 15.5 percent over the 1995 to 2000 interval. The changing, potential contribution by this age group to future college enrollments because of these fluctuations in rates of expansion is apparent, but the total impact of changes in this age group and those in the 25 through 34 year-olds is not at all obvious. The 1990's expansion in the 18 to 24 age group is expected to take place while the 25 through 34 year-old age group is actually decreasing in total numbers. The net effect on college enrollments will be the outcome of differences in the rates at which the age groups contribute to college enrollments, weighted by the relative sizes of the populations of the age groups. And, clearly, analysis along these lines should not be confined to age groups as broad as 18-24 and 25-34; even if it were the case that specific ages enroll at constant rates from one year to another, the age composition of broad age groups is far from being fixed over time.

### Age- and Sex-Specific Enrollment Rates

Very interesting variations in rates of enrollment from one year of age to another emerge from the data on Utah resident enrollments. The Autumn headcounts at four-year, public institutions are detailed in Table 3 for Utah residents with regular, on-campus, for-credit enrollment. These restrictive qualifications ignore appreciable numbers with other forms of enrollment, but provide a focus on the category of student where changing numbers have direct implications for changes in the economic burden on the State of Utah. Data this narrowly qualified have only recently become available. In particular, there is no ability to compare corresponding enrollments for 1979 or 1980 against the standard of the 1980 enumeration of the Utah population of the U. S. Census, as enrollment data for 1980 are not available in this detail.

The 1985 and 1986 headcounts can be related to the age- and sex-specific estimates of the Utah population developed for the 1987 Baseline Projection discussed earlier. Estimates, necessarily, are less accurate than enumerations so the very precise headcount data are blended with the population estimates to form average Autumn enrollment rates over 1985 and 1986 instead of separate estimates for 1985 and 1986. Year-specific enrollment rate estimates were not calculated as they could all too easily indicate short term trends in enrollment rates, that are in fact only the consequence of errors in the estimation of the population by specific year of age. The age- and sex-specific population estimates used are presented in Table 4, and it should be noted that they were adjusted from the numbers contained in the "Baseline 1987" projections. The original estimates are survived forward in one-year steps with years of age defined as of April 1. These populations were adjusted to be commensurate with the Autumn determination of age by assigning to age "i" in year "t" the average of the numbers for age "i-1" and "i" in year "t" and ages "i" and "i+1" in year "t+1". The resulting estimates of enrollment rates displayed in Table 4 are presented in Chart 1.

The graph in Chart 1 shows a marked difference in the pattern of enrollments by age between males and females as of the 1985-86 period. The peak female enrollment of 16.3 percent of 19-year-olds slightly exceeds the peak male rate of 16.0 percent of 22-year-olds; but not only does the peak male rate occur at an older age, it also has risen from a trough at age 20 following an earlier, and lower peak at age 18. These cross-sectional rates suggest interesting dynamics of mission or military service, family formation, and return (especially by females) to unfinished programs.

It should be emphasized that cross-sectional data are not good substitutes for year-by-year rates of cohorts as they pass through time. For a hypothetical example, it is possible that 23 year-old females in 1985 were enrolled at higher rates than were 23 year-old females in 1970; and as a direct consequence of higher completion rates now, that 38 year-olds in the year 2000 may be enrolling at lower rates than did 38 year-olds in 1985. Thus, even an extreme assumption of steady "life-cycle" behavior from this moment on does not justify an extension in time of the contemporary "cross-sectional" rates. The currently available data suggest many avenues for analysis that were not previously possible, but the projections reported here must be understood to be only indicative of future conditions, and are subject to substantial refinement as investigations into the determinants of higher educational enrollments take place. Still, even if only as indicators, the implications of these recent, cross-sectional enrollment rates are quite surprising.

Projected Autumn headcounts at five-year intervals of residents in regular, on-campus, for-credit enrollments at Utah's public, four-year colleges and universities are shown in Table 5. This subcategory of enrollments is calculated to expand by 4.1 percent between 1985 and 1990 with the most rapidly increasing segment -- persons 35 through 44 years of age -- growing at a rate of 4.4 percent per year. The traditional attendance years of 17-24 expand over this interval at less than 1 percent per year while the 25 through 34 year-olds actually decreases in size. The decrease in the 25-34 age group is concentrated in the under 30 segment which, because of the relatively large contribution to enrollments made by this group, produces a near-term future of modest growth.

It should not be assumed that credit hours or costs expand or contract simplistically with changes in total numbers nor that the goals of society are best approximated expansion with present compositions and structures of enrollments. However, the relatively low rates of expansion projected in this category of enrollments are particularly modest in the context of the rapid growth shown in Table 1 to be expected in the segment of the society in the generally economically advantaged portion of their life cycle -- the years 45 to 64. The growth projected in the resident Autumn headcounts exceeds 2.1 percent per year between 1995 and 2000, which is substantially up from the 1.7 percent per year projected between 1990 and 1995. However, these rates are about one-half the growth rates of 4.2 percent per year that can be calculated for the projected total population 45 - 64 shown on Table 1.

The trends sketched in Chart 2 of accumulated for credit, on-campus resident enrollments show the enrollment increases following 1990 to be initially concentrated in the 17-24 age group; then after 2000 to switch to the 25-34 segment. The enrollments in the group 45 and over have a sustained, high growth rate but contribute relatively little to total enrollments.

### Table 3

### Regular, On-Campus, For-Credit Resident Enrollments at Utah's Public Four-Year Colleges and Universities Autumn Headcounts: 1985 and 1986 by Age and Sex

| | 1985 | | | | 1986 | | | |
|---|---|---|---|---|---|---|---|---|
| Age | Male | Female | Unknown | Sum | Male | Female | Unknown | Sum |
| 17 & under | 76 | 158 | 1 | 235 | 105 | 127 | 2 | 234 |
| 18 | 1,805 | 1,907 | 1 | 3,713 | 1,873 | 2,143 | 4 | 4,020 |
| 19 | 1,435 | 2,300 | 0 | 3,735 | 1,408 | 2,290 | 6 | 3,704 |
| 20 | 1,275 | 2,007 | 4 | 3,286 | 1,258 | 2,162 | 6 | 3,426 |
| 21 | 2,167 | 1,832 | 4 | 4,003 | 2,105 | 1,788 | 8 | 3,901 |
| 22 | 2,425 | 1,400 | 7 | 3,832 | 2,470 | 1,463 | 3 | 3,936 |
| 23 | 2,434 | 1,038 | 3 | 3,475 | 2,339 | 1,088 | 7 | 3,434 |
| 24 | 2,184 | 855 | 3 | 3,042 | 2,053 | 811 | 11 | 2,875 |
| 25 | 1,733 | 681 | 1 | 2,415 | 1,745 | 696 | 6 | 2,447 |
| 26 | 1,371 | 543 | 4 | 1,918 | 1,347 | 582 | 10 | 1,939 |
| 27 | 1,062 | 494 | 3 | 1,559 | 1,067 | 505 | 7 | 1,579 |
| 28 | 811 | 498 | 5 | 1,314 | 832 | 451 | 7 | 1,290 |
| 29 | 654 | 431 | 1 | 1,086 | 705 | 473 | 6 | 1,184 |
| 30-34 | 2,152 | 1,964 | 13 | 4,129 | 2,225 | 1,953 | 17 | 4,195 |
| 35-39 | 945 | 1,405 | 15 | 2,365 | 963 | 1,510 | 18 | 2,491 |
| 40-44 | 404 | 831 | 6 | 1,241 | 433 | 930 | 12 | 1,375 |
| 45-49 | 209 | 471 | 4 | 684 | 223 | 488 | 5 | 716 |
| 50-54 | 74 | 251 | 0 | 325 | 98 | 238 | 1 | 337 |
| 55-59 | 36 | 108 | 1 | 145 | 47 | 101 | 0 | 148 |
| 60-64 | 33 | 79 | 4 | 116 | 32 | 57 | 0 | 89 |
| 65-69 | 25 | 41 | 4 | 70 | 33 | 50 | 6 | 89 |
| 70 & over | 20 | 30 | 3 | 53 | 26 | 38 | 2 | 66 |
| Unkown | 116 | 121 | 15 | 252 | 80 | 75 | 4 | 159 |
| All Ages | 23,446 | 19,445 | 102 | 42,993 | 23,467 | 20,019 | 148 | 43,634 |

Source: Accumulated by the Bureau of Economic and Business Research from unpublished student age information by institution provided by the Utah System of Higher Education, The State Board of Regents, Salt Lake City, Utah.

### Table 4

### Estimated Utah Population by Age and Sex and Imputed Resident Enrollment Rates Over 1985 and 1986

| | "Baseline 1987" Population Estimates Adjusted to October Ages | | | | Mean Enrollment Rates over 1985 and 1986 for Persons of Known and Imputed Age and Sex | |
|---|---|---|---|---|---|---|
| | 1985 | | 1986 | | | |
| Age | Male | Female | Male | Female | Male | Female |
| 17 | 13,444 | 13,098 | 14,624 | 14,164 | 0.7 | 1.1 |
| 18 | 12,975 | 13,532 | 13,449 | 13,980 | 14.0 | 14.8 |
| 19 | 12,082 | 14,114 | 11,858 | 14,257 | 11.9 | 16.3 |
| 20 | 12,148 | 14,506 | 11,828 | 14,454 | 10.6 | 14.5 |
| 21 | 13,834 | 14,803 | 14,209 | 14,593 | 15.3 | 12.4 |
| 22 | 15,346 | 14,747 | 15.455 | 14,456 | 16.0 | 9.9 |
| 23 | 15,970 | 14,663 | 15,463 | 14,255 | 15.3 | 7.4 |
| 24 | 16,764 | 15,117 | 15,633 | 14,239 | 13.2 | 5.7 |
| 25 | 16,932 | 15,533 | 16,236 | 14,708 | 10.5 | 4.6 |
| 26 | 15,443 | 14,943 | 16,404 | 15,192 | 8.6 | 3.8 |
| 27 | 14,541 | 14,374 | 14,964 | 14,625 | 7.3 | 3.5 |
| 28 | 14,622 | 14,326 | 14,140 | 14,088 | 5.8 | 3.4 |
| 29 | 14,431 | 14,188 | 14,322 | 14,157 | 4.8 | 3.2 |
| 30-34 | 66,839 | 65,865 | 68,437 | 67,462 | 3.3 | 3.0 |
| 35-39 | 55,119 | 54,387 | 57,633 | 56,974 | 1.7 | 2.6 |
| 40-44 | 40,248 | 40,270 | 42,383 | 42,250 | 1.0 | 2.2 |
| 45-49 | 31,990 | 32,576 | 33,081 | 33,497 | 0.7 | 1.5 |
| 50-54 | 27,521 | 28,464 | 27,812 | 28.840 | 0.3 | 0.9 |
| 55-59 | 26,381 | 27,675 | 26,308 | 27,642 | 0.2 | 0.4 |
| 60-64 | 24,050 | 26,280 | 24,192 | 26,431 | 0.1 | 0.3 |
| 65-69 | 21,473 | 24,592 | 21,990 | 25,083 | 0.1 | 0.2 |
| 70+ | 38,978 | 57,832 | 40.936 | 60,832 | 0.1 | 0.1 |

Sources: Population Estimates--1987 Baseline Projections, Utah Office of Planning and Budget. Adjusted to October Ages by the Bureau of Economic and Business Research.
Enrollment Rates--Calculated by the Bureau of Economic and Business Research as weighted averages from data presented in Table 3.

Chart 3 presents the basis for higher education representing a decreasing, relative burden on the Utah economy over the next generation -- the rapidly expanding part of the Utah population for the next generation is the segment 45 years of age and older. This segment not only places low demands on the system of higher education, but it possesses the preponderance of ability to pay taxes, and to assume the burden of financing the education of its children.

### Table 5

Projected Autumn Headcounts for Selected Years
of Regular, On-Campus, For-Credit Resident Enrollments
at Utah's Public Four-Year Colleges and Universities
Using Rates Estimated from 1985 and 1986 Enrollments

with

Relative Changes in Sizes of These Enrollments
at Five-Year Intervals by Broad Age Groups

and

Annually Compounded Growth Rates by Interval

| Age Group | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 |
|---|---|---|---|---|---|---|
| 17-24 | 25,470 | 26,514 | 29,744 | 34,288 | 34,157 | 33,609 |
| 25-34 | 12,494 | 12,395 | 12,109 | 12,463 | 15,053 | 17,501 |
| 35-44 | 3,627 | 4,494 | 5,170 | 5,200 | 5,061 | 5,579 |
| 45+ | 1,401 | 1,521 | 2,007 | 2,443 | 2,848 | 3,109 |
| All Ages | 42,993 | 45,024 | 49,029 | 54,394 | 57,118 | 59,798 |

| Interval | 1990/1985 | 1995/1990 | 2000/1995 | 2005/2000 | 2010/2005 |
|---|---|---|---|---|---|
| 17-24 | 1.041 | 1.122 | 1.153 | 0.996 | 0.984 |
| 25-34 | 0.992 | 0.977 | 1.029 | 1.208 | 1.163 |
| 35-44 | 1.239 | 1.150 | 1.006 | 0.973 | 1.102 |
| 45+ | 1.157 | 1.238 | 1.217 | 1.166 | 1.092 |
| All Ages | 1.047 | 1.089 | 1.109 | 1.050 | 1.047 |

| Interval Growth Rates | 1985-1990 | 1990-1995 | 1995-2000 | 2000-2005 | 2005-2010 |
|---|---|---|---|---|---|
| | (Percent per Year, Annually Compounded) | | | | |
| 17-24 | 0.8 | 2.3 | 2.9 | -0.1 | -0.3 |
| 25-34 | -0.2 | -0.5 | 0.6 | 3.8 | 3.1 |
| 35-44 | 4.4 | 2.8 | 0.1 | -0.5 | 2.0 |
| 45+ | 3.0 | 4.4 | 4.0 | 3.1 | 1.8 |
| All Ages | 0.9 | 1.7 | 2.1 | 1.0 | 0.9 |

Source: Calculated by the Bureau of Economic and Business Research from the 1987 Baseline Projections, Utah Office of Planning and Budget with Single Year of Age- and Sex-Specific Rates Presented in Table 4.

Chart 1
Estimated Enrollment Rates of Utahns
in Utah's Public Four-Year Institutions

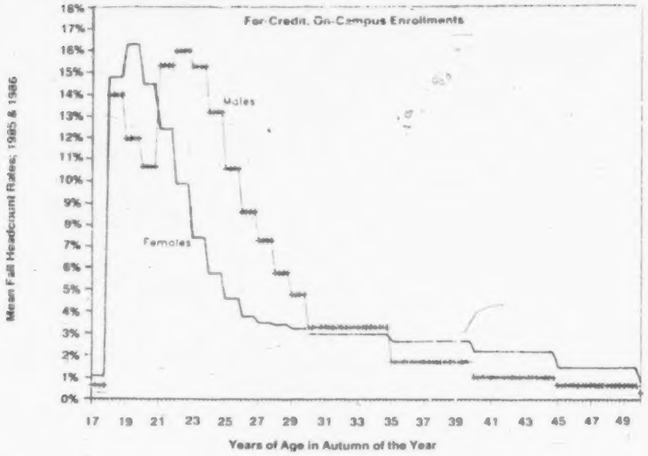


Chart 2
Projected Enrollment of Utahns
in Utah's Public Four-Year Institutions

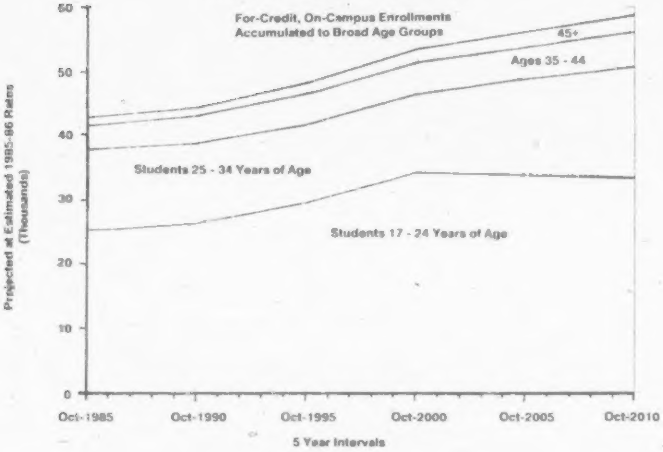
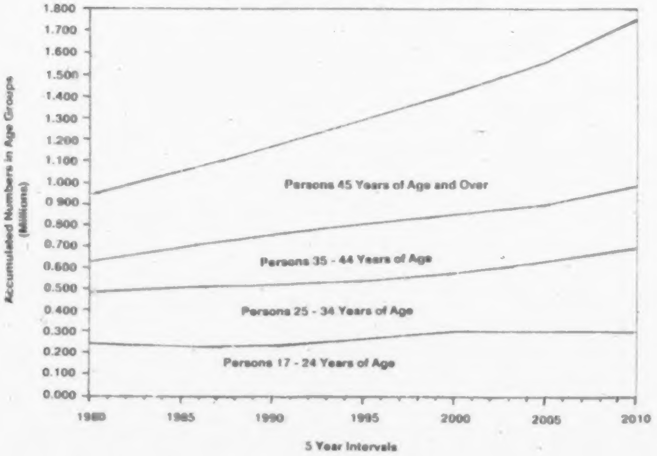


Chart 3
Estimated and Projected Number of Utahns
Selected Broad Age Groups: 1980 to 2010



# Utah Business Statistics

| UTAH DATA | May 1986 | May 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 17,879 | NA | NA | NA | 17,578.5 | NA |
| New Corporations (no.) | 479 | 478 | -0.2% | 448 | 452 | -1.0% |
| New Car, Truck and Motorhome Sales (no.) | 7,488 | NA | NA | NA | 6,355 | NA |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 52.50 | 66.80 | 27.2% | 58.74 | 54.05 | 8.7% |
| Lambs (cwt) | 69.50 | 75.70 | 8.9% | 69.48 | 64.71 | 7.4% |
| Milk Wholesale (cwt) | 11.30 | 11.40 | 0.9% | 11.99 | 11.64 | 3.0% |
| Alfalfa Hay, Baled (per ton) | 73.00 | 59.00 | -19.2% | 64.42 | 71.48 | -9.9% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 34,230 | 35,537 | 3.8% | 39,087 | 34,486 | 13.3% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 134,920 | 106,975 | -20.7% | 126,732 | 131,206 | -3.4% |
| Residential | 85,543 | 61,782 | -27.8% | 59,010 | 59,123 | -0.2% |
| Nonresidential | 41,164 | 40,486 | -1.6% | 45,569 | 44,547 | 2.3% |
| Public Works and Utilities | 11,213 | 4,707 | -58.0% | 22,153 | 27,786 | -20.3% |
| Total Permit Construction (thous. of dol.) [2] | 130,371.5 | 106,567.1 | -18.3% | 105,447.3 | 121,095.4 | -12.9% |
| Residential | 80,831.4 | 54,149.7 | -33.0% | 54,775.8 | 60,572.5 | -9.6% |
| Nonresidential | 37,680.3 | 39,663.2 | 5.3% | 37,225.3 | 46,471.3 | -19.9% |
| Additions, Alterations and Repairs | 11,859.8 | 12,754.2 | 7.5% | 13,466.8 | 13,551.6 | -0.6% |
| New Dwelling Units (no.) | 1,469 | 851 | -42.1% | 941 | 1,223 | -23.1% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 740.3 | 759.8 | 2.6% | 761.7 | 751.5 | 1.4% |
| Total Employed Persons | 702.2 | 709.9 | 1.1% | 713.9 | 708.8 | 0.7% |
| Unemployed Persons | 38.1 | 49.9 | 31.0% | 47.5 | 42.5 | 11.8% |
| Percent Total Labor Force | 5.1 | 6.6 | 29.4% | 6.3 | 5.6 | 10.9% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 636.8 | 642.0 | 0.8% | 637.2 | 631.0 | 1.0% |
| Manufacturing | 92.5 | 92.9 | 0.4% | 91.3 | 94.3 | -3.2% |
| Mining | 8.4 | 8.4 | 0.0% | 8.1 | 9.0 | -9.5% |
| Contract Construction | 34.4 | 28.6 | -16.9% | 31.6 | 35.6 | -11.2% |
| Transportaion, Communication and Utilities | 37.0 | 37.2 | 0.5% | 37.5 | 36.9 | 1.6% |
| Wholesale Trade | 35.7 | 36.3 | 1.7% | 36.1 | 35.8 | 1.0% |
| Retail Trade | 116.0 | 118.9 | 2.5% | 118.2 | 114.3 | 3.4% |
| Finance, Insurance and Real Estate | 33.1 | 33.9 | 2.4% | 33.4 | 31.8 | 4.9% |
| Services [3] | 134.8 | 139.5 | 3.5% | 139.7 | 134.2 | 4.1% |
| Federal Government | 40.8 | 40.2 | -1.5% | 40.5 | 39.9 | 1.5% |
| State Government [4] | 39.1 | 38.4 | -1.8% | 37.8 | 36.6 | 3.4% |
| Local Government [4] | 65.0 | 67.6 | 4.0% | 63.8 | 62.7 | 1.7% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 40.4 | 39.7 | -1.7% | 39.7 | 40.5 | -1.8% |
| Mining | 46.7 | 41.7 | -10.7% | 42.8 | 44.7 | -4.4% |
| Wholesale Trade | 37.3 | 40.0 | 7.2% | 37.6 | 35.5 | 5.9% |
| Retail Trade | 27.9 | 28.7 | 2.9% | 28.3 | 28.2 | 0.4% |
| Amount of Unemployment Compensation (thous. of dol.) | 7,402.4 | 6,973.2 | -5.8% | 8,845.1 | 7,542.0 | 17.3% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,361.4 | 2,502.4 | 6.0% | 2,416.1 | 2,353.8 | 2.6% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 262,198.0 | 228,408.5 | -12.9% | 126,674.8 | 126,199.6 | 0.4% |
| Sales and Use Tax | 112,358.0 | 98,703.0 | -12.2% | 46,088.9 | 45,101.0 | 2.2% |
| Motor Fuel Tax | 11,851.1 | 10,832.3 | -8.6% | 7,906.8 | 7,809.8 | 1.2% |
| Individual Income Tax | 64,467.3 | 70,466.9 | 9.3% | 44,098.4 | 37,476.9 | 17.7% |
| Corporation Franchise Tax | 10,527.1 | 7,180.8 | -31.8% | 4,159.5 | 5,736.7 | -27.5% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,072.8 | 1,076.9 | 0.4% | 1,110.4 | 1,115.0 | -0.4% |
| Crude Oil to Refineries (thous. of bbls.) | 4,000.0 | 3,948.0 | -1.3% | 3,928.0 | 3,732.5 | 5.2% |
| Crude Oil (thous. of bbls.) | 3,443.2 | 3,068.5 | -10.9% | 3,047.8 | 3,502.5 | -13.0% |
| Natural Gas (mil. of cu. ft.) | 17,386.3 | 20,002.0 | 15.0% | 19,974.3 | 18,693.9 | 6.9% |
| Coal (thous. short tons) | 1,060.0 | 1,128.0 | 6.4% | 914.0 | 1,072.7 | -14.8% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 829,254 | 786,837 | -5.1% | 832,078 | 783,471 | 6.2% |
| Highway Traffic Count Across State Lines | 36,782 | 39,389 | 7.1% | 37,898 | 35,065 | 8.1% |
| Transient Room Taxes (thous. of dol.) | 1,051.5 | 927.8 | -11.8% | 473.3 | 384.4 | 23.1% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 1,537.6 | 1,499.4 | -2.5% | 1,010.7 | 959.8 | 5.3% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 469,072 | 478,375 | 2.0% | 475,500 | 466,239 | 2.0% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 167,493 | 175,513 | 4.8% | 171,591 | 166,355 | 3.1% |
| Electric Customers (Residential) | 458,706 | 470,750 | 2.6% | 466,620 | NA | NA |
| Electric Customers (Commercial) | 44,950 | 46,677 | 3.8% | 45,815 | NA | NA |
| Natural Gas Customers (Residential & Commercial) | 434,762 | 446,543 | 2.7% | 440,544 | 428,045 | 2.9% |
| Natural Gas Customers (Industrial) | 567 | 557 | -1.8% | 563 | 571 | -1.3% |

# Utah Business Statistics

| UTAH DATA | May 1986 | May 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| **Davis County** | | | | | | |
| Non-Ag. Employment (thous.) | 53.4$^{r}$ | 53.8$^{fo}$ | 0.7% | 53.0 | 52.9 | 0.2% |
| Unemployment Rate | 4.1$^{r}$ | 5.6 | 36.6% | 4.9 | 3.8 | 26.9% |
| Auth. Permit Construction (thous. of dol.) | 20,509.0 | 10,135.8 | -50.6% | 16,355.9 | 15,363.8 | 6.5% |
| New Dwelling Units (no.) | 209 | 115 | -45.0% | 179 | 202 | -11.2% |
| Postal Receipts (thous. of dol.) | 356.7 | 612.5 | 71.7% | NA | 321.2 | NA |
| Electric Customers (Residential) | 44,859 | 47,220 | 5.3% | 46,175 | 37,942 | 21.7% |
| Electric Customers (Commercial) | 3,340 | 3,457 | 3.5% | 3,266 | 2,807 | 16.3% |
| Natural Gas Customers (Residential) | 46,062 | 48,784 | 5.9% | 47,525 | 45,031 | 5.5% |
| Natural Gas Customers (Industrial) | 50 | 52 | 4.0% | 52 | 50 | 2.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 52,743 | 54,834 | 4.0% | 53,988 | 50,086 | 7.8% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,097 | 10,535 | 4.3% | 10,283 | 9,634 | 6.7% |
| **Salt Lake County** | | | | | | |
| Non-Ag. Employment (thous.) | 328.7$^{r}$ | 334.7$^{fo}$ | 1.8% | 334.7 | 327.8 | 2.1% |
| Unemployment Rate | 5.3$^{r}$ | 5.6 | 5.7% | 5.4 | 5.6 | -2.4% |
| Auth. Permit Construction (thous. of dol.) | 55,025.5 | 43,286.2 | -21.3% | 51,502.7 | 62,369.7 | -17.4% |
| New Dwelling Units (no.) | 542 | 323 | -40.4% | 409 | 542 | -24.5% |
| Postal Receipts (thous. of dol.) | 7,264.3 | 7,140.8 | -1.7% | 7,083.7 | 7,330.9 | -3.4% |
| Electric Customers (Residential) | 231,009 | 235,420 | 1.9% | 233,707 | 226,933 | 3.0% |
| Electric Customers (Commercial) | 19,187 | 19,856 | 3.5% | 19,597 | 18,853 | 3.9% |
| Natural Gas Customers (Residential) | 212,415 | 217,830 | 2.5% | 215,019 | 208,401 | 3.2% |
| Natural Gas Customers (Industrial) | 253 | 242 | -4.3% | 251 | 260 | -3.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 221,751 | 226,591 | 2.2% | 224,583 | 219,348 | 2.4% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 107,468 | 109,861 | 2.2% | 108,779 | 107,247 | 1.4% |
| **Utah County** | | | | | | |
| Non-Ag. Employment (thous.) | 70.7$^{r}$ | 69.8$^{fo}$ | -1.3% | 71.2 | 71.2 | -0.1% |
| Unemployment Rate | 5.6$^{r}$ | 7.4 | 32.1% | 7.1 | 6.1 | 16.8% |
| Auth. Permit Construction (thous. of dol.) | 16,194.0 | 21,747.1 | 34.3% | 11,225.7 | 10,295.6 | 9.0% |
| New Dwelling Units (no.) | 258 | 147 | -43.0% | 107 | 93 | 15.7% |
| Postal Receipts (thous. of dol.) | 890.7 | 953.3 | 7.0% | 923.8 | 916.4 | 0.8% |
| Electric Customers (Residential) | 49,772 | 50,677 | 1.8% | 50,171 | NA | NA |
| Electric Customers (Commercial) | 6,084 | 6,524 | 7.2% | 6,296 | NA | NA |
| Natural Gas Customers (Residential) | 59,252 | 59,975 | 1.2% | 59,954 | 58,962 | 1.7% |
| Natural Gas Customers (Industrial) | 72 | 68 | -5.6% | 73 | 71 | 2.8% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 60,251 | 61,148 | 1.5% | 62,218 | 61,559 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 15,786 | 18,667 | 18.3% | 17,068 | 15,251 | 11.9% |
| **Weber County** | | | | | | |
| Non-Ag. Employment (thous.) | 59.8$^{r}$ | 60.7$^{fo}$ | 1.5% | 59.7 | 58.2 | 2.6% |
| Unemployment Rate | 5.9$^{r}$ | 7.2 | 22.0% | 6.7 | 5.5 | 21.6% |
| Auth. Permit Construction (thous. of dol.) | 15,498.5 | 7,762.2 | -49.9% | 9,163.9 | 8,925.9 | 2.7% |
| New Dwelling Units (no.) | 229 | 84 | -63.3% | 74 | 95 | -22.2% |
| Postal Receipts (thous. of dol.) | 613.9 | 603.6 | -1.7% | 619.9 | 603.7 | 2.7% |
| Electric Customers (Residential) | 51,662 | 52,652 | 1.9% | 52,300 | 51,083 | 2.4% |
| Electric Customers (Commercial) | 4,708 | 4,822 | 2.4% | 4,778 | 4,685 | 2.0% |
| Natural Gas Customers (Residential) | 47,974 | 49,495 | 3.2% | 48,576 | 47,383 | 2.5% |
| Natural Gas Customers (Industrial) | 87 | 86 | -1.1% | 86 | 86 | -1.0% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,391 | 46,004 | 1.4% | $^{r}$ 45,628 | 45,181 | 1.0% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,463 | 10,947 | 4.6% | 10,671 | 10,502 | 1.6% |

$^{r}$ Revised $^{p}$ Preliminary na Not available $^{fo}$ Forecast

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U. S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics
[2] Obtained from Utah Construction Report
[3] Includes services by nonprofit and religious institutions
[4] Includes public schools and college institutions

# Utah Business Statistics

| UTAH DATA | June 1986 | June 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 17,879 | NA | NA | NA | 17,633.8 | NA |
| New Corporations (no.) | 445 | 507 | 13.9% | 453 | 454 | -0.3% |
| New Car, Truck and Motorhome Sales (no.) | 6,037 | NA | NA | NA | 6,295 | NA |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 51.00 | 66.50 | 30.4% | 60.03 | 53.68 | 11.8% |
| Lambs (cwt) | 69.40 | 76.80 | 10.7% | 70.10 | 64.99 | 7.9% |
| Milk Wholesale (cwt) | 11.20 | 11.40 | 1.8% | 12.01 | 11.63 | 3.2% |
| Alfalfa Hay, Baled (per ton) | 71.00 | 69.00 | -2.8% | 64.25 | 71.06 | -9.6% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 37,409 | 39,501 | 5.6% | 39,261 | 35,212 | 11.5% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 244,093 | 210,246 | -13.9% | 123,912 | 140,747 | -12.0% |
| Residential | 75,317 | 66,920 | -11.1% | 58,311 | 60,516 | -3.6% |
| Nonresidential | 139,490 | 56,391 | -59.6% | 38,644 | 51,505 | -25.0% |
| Public Works and Utilities | 29,286 | 86,935 | 196.8% | 26,957 | 28,968 | -6.9% |
| Total Permit Construction (thous. of dol.) [2] | 146,093.8 | 95,014.8 | -35.0% | 101,190.7 | 124,259.9 | -18.6% |
| Residential | 76,895.5 | 50,311.4 | -34.6% | 52,560.4 | 62,047.0 | -15.3% |
| Nonresidential | 50,827.3 | 27,991.5 | -44.9% | 35,322.3 | 47,748.5 | -26.0% |
| Additions, Alterations and Repairs | 18,653.4 | 16,711.9 | -10.4% | 13,305.0 | 13,987.9 | -4.9% |
| New Dwelling Units (no.) | 1,734 | 727 | -58.1% | 857 | 1,272 | -32.6% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 750.8 | 761.6 | 1.4% | 762.6 | 752.2 | 1.4% |
| Total Employed Persons | 707.0 | 712.3 | 0.7% | 714.4 | 709.6 | 0.7% |
| Unemployed Persons | 40.9 | 49.3 | 20.5% | 48.2 | 42.2 | 14.2% |
| Percent Total Labor Force | 5.5 | 6.5 | 18.2% | 6.3 | 5.6 | 13.3% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 636.5 | 643.2 | 1.1% | 637.7 | 632.0 | 0.9% |
| Manufacturing | 93.0 | 93.6 | 0.6% | 91.4 | 94.0 | -2.9% |
| Mining | 7.8 | 8.1 | 3.8% | 8.2 | 8.8 | -7.6% |
| Contract Construction | 35.6 | 29.6 | -16.9% | 31.1 | 35.4 | -12.2% |
| Transportaion, Communication and Utilities | 37.2 | 37.9 | 1.9% | 37.6 | 37.0 | 1.7% |
| Wholesale Trade | 36.1 | 36.5 | 1.1% | 36.2 | 35.8 | 1.0% |
| Retail Trade | 116.3 | 119.5 | 2.8% | 118.4 | 114.7 | 3.3% |
| Finance, Insurance and Real Estate | 33.1 | 34.2 | 3.3% | 33.5 | 32.0 | 4.6% |
| Services [3] | 136.2 | 143.2 | 5.1% | 140.3 | 134.7 | 4.1% |
| Federal Government | 40.8 | 39.8 | -2.5% | 40.4 | 40.0 | 1.1% |
| State Government [4] | 37.7 | 36.5 | -3.2% | 37.7 | 36.8 | 2.3% |
| Local Government [4] | 62.7 | 64.4 | 2.7% | 63.9 | 62.8 | 1.8% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 39.8 | 39.8 | 0.0% | 39.7 | 40.4 | -1.7% |
| Mining | 40.8 | 40.0 | -2.0% | 42.7 | 44.3 | -3.7% |
| Wholesale Trade | 37.3 | 38.8 | 4.0% | 37.7 | 35.7 | 5.8% |
| Retail Trade | 28.6 | 28.8 | 0.7% | 28.3 | 28.1 | 0.8% |
| Amount of Unemployment Compensation (thous. of dol.) | 6,825.1 | 7,375.1 | 8.1% | 8,890.9 | 7,640.8 | 16.4% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,361.4 | 2,476.5 | 4.9% | 2,425.7 | 2,347.6 | 3.3% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 122,472.5 | 156,747.8 | 28.0% | 129,531.1 | 125,093.1 | 3.5% |
| Sales and Use Tax | 56,912.1 | 62,358.9 | 9.6% | 46,542.8 | 45,246.2 | 2.9% |
| Motor Fuel Tax | 9,860.6 | 14,960.3 | 51.7% | 8,331.8 | 7,680.3 | 8.5% |
| Individual Income Tax | 30,044.0 | 33,916.5 | 12.9% | 44,421.1 | 37,628.5 | 18.1% |
| Corporation Franchise Tax | 508.3 | 11,481.2 | 2158.7% | 5,073.9 | 5,622.2 | -9.8% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,108.6 | 1,135.0 | 2.4% | 1,112.6 | 1,117.3 | -0.4% |
| Crude Oil to Refineries (thous. of bbls.) | 3,921.3 | 3,804.9 | -3.0% | 3,918.3 | 3,704.9 | 5.8% |
| Crude Oil (thous. of bbls.) | 2,926.0 | 2,896.1 | -1.0% | 3,045.3 | 3,465.9 | -12.1% |
| Natural Gas (mil. of cu. ft.) | 17,535.9 | 19,950.6 | 13.8% | 20,176.0 | 18,770.9 | 7.5% |
| Coal (thous. short tons) | 1,060.0 | 1,167.0 | 12.0% | 924.6 | 1,086.7 | -14.9% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 897,797 | 913,902 | 1.8% | 833,420 | 786,043 | 6.0% |
| Highway Traffic Count Across State Lines | 45,298 | 48,264 | 6.5% | 38,146 | 34,976 | 9.1% |
| Transient Room Taxes (thous. of dol.) | 1,016.3 | 582.5 | -42.7% | 437.2 | 463.8 | -5.7% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 1,733.4 | 1,977.6 | 14.1% | 1,031.1 | 956.5 | 7.8% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 468,349 | 477,221 | 1.9% | 476,240 | 467,144 | 1.9% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 167,803 | 175,281 | 4.5% | 172,214 | 166,418 | 3.5% |
| Electric Customers (Residential) | 459,233 | 467,881 | 1.9% | 467,341 | NA | NA |
| Electric Customers (Commercial) | 45,117 | 46,273 | 2.6% | 45,912 | NA | NA |
| Natural Gas Customers (Residential & Commercial) | 433,460 | 443,654 | 2.4% | 441,393 | 429,167 | 2.8% |
| Natural Gas Customers (Industrial) | 564 | 556 | -1.4% | 563 | 569 | -1.2% |

# Utah Business Statistics

| UTAH DATA | June 1986 | June 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| **Davis County** | | | | | | |
| Non-Ag. Employment (thous.) | 54.0[r] | 54.4[fo] | 0.7% | 53.1 | 53.1 | 0.0% |
| Unemployment Rate | 4.5[r] | 5.6 | 24.4% | 5.0 | 3.9 | 27.4% |
| Auth. Permit Construction (thous. of dol.) | 27,750.0 | 12,728.7 | -54.1% | 15,104.1 | 16,345.6 | -7.6% |
| New Dwelling Units (no.) | 580 | 120 | -79.3% | 141 | 236 | -40.2% |
| Postal Receipts (thous. of dol.) | 330.1 | 347.4 | 5.2% | NA | 322.6 | NA |
| Electric Customers (Residential) | 44,843 | 47,121 | 5.1% | 46,365 | 38,974 | 19.0% |
| Electric Customers (Commercial) | 3,277 | 3,271 | -0.2% | 3,265 | 2,879 | 13.4% |
| Natural Gas Customers (Residential) | 46,153 | 48,677 | 5.5% | 47,736 | 45,209 | 5.6% |
| Natural Gas Customers (Industrial) | 50 | 86 | 72.0% | 55 | 50 | 8.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 52,955 | 54,959 | 3.8% | 54,155 | 51,230 | 5.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,123 | 10,575 | 4.5% | 10,321 | 9,847 | 4.8% |
| **Salt Lake County** | | | | | | |
| Non-Ag. Employment (thous.) | 331.9[r] | 338.0[fo] | 1.8% | 335.2 | 328.2 | 2.1% |
| Unemployment Rate | 5.2[r] | 5.6 | 7.7% | 5.5 | 5.6 | -1.5% |
| Auth. Permit Construction (thous. of dol.) | 75,616.3 | 42,610.0 | -42.3% | 48,835.5 | 64,781.9 | -24.6% |
| New Dwelling Units (no.) | 688 | 274 | -60.2% | 374 | 562 | -33.4% |
| Postal Receipts (thous. of dol.) | 7,116.9 | 6,786.3 | -4.6% | 7,056.1 | 7,398.3 | -4.6% |
| Electric Customers (Residential) | 229,986 | 234,279 | 1.9% | 234,064 | 227,603 | 2.8% |
| Electric Customers (Commercial) | 19,264 | 19,792 | 2.7% | 19,641 | 18,918 | 3.8% |
| Natural Gas Customers (Residential) | 211,694 | 216,415 | 2.2% | 215,413 | 209,087 | 3.0% |
| Natural Gas Customers (Industrial) | 258 | 241 | -6.6% | 249 | 259 | -3.7% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 221,901 | 226,229 | 2.0% | 224,943 | 219,852 | 2.3% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 107,632 | 109,682 | 1.9% | 108,950 | 107,091 | 1.7% |
| **Utah County** | | | | | | |
| Non-Ag. Employment (thous.) | 71.1[r] | 71.0[fo] | -0.1% | 71.2 | 71.5 | -0.4% |
| Unemployment Rate | 5.6[r] | 7.1 | 26.8% | 7.3 | 6.1 | 20.0% |
| Auth. Permit Construction (thous. of dol.) | 13,799.9 | 13,321.5 | -3.5% | 11,185.9 | 10,712.2 | 4.4% |
| New Dwelling Units (no.) | 162 | 96 | -40.7% | 102 | 98 | 4.2% |
| Postal Receipts (thous. of dol.) | 854.4 | 903.0 | 5.7% | 927.8 | 917.1 | 1.2% |
| Electric Customers (Residential) | 49,310 | 50,225 | 1.9% | 50,247 | NA | NA |
| Electric Customers (Commercial) | 6,189 | 6,587 | 6.4% | 6,330 | NA | NA |
| Natural Gas Customers (Residential) | 59,080 | 59,591 | 0.9% | 59,996 | 59,043 | 1.6% |
| Natural Gas Customers (Industrial) | 73 | 68 | -6.8% | 72 | 71 | 2.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 60,141 | 61,134 | 1.7% | 62,300 | 61,642 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 15,825 | 18,459 | 16.6% | 17,287 | 15,349 | 12.6% |
| **Weber County** | | | | | | |
| Non-Ag. Employment (thous.) | 60.0[r] | 60.9[fo] | 1.5% | 59.8 | 58.5 | 2.3% |
| Unemployment Rate | 6.5[r] | 7.7 | 18.5% | 6.8 | 5.5 | 22.1% |
| Auth. Permit Construction (thous. of dol.) | 7,603.0 | 9,470.0 | 24.6% | 9,319.5 | 8,626.8 | 8.0% |
| New Dwelling Units (no.) | 87 | 69 | -20.7% | 73 | 95 | -23.7% |
| Postal Receipts (thous. of dol.) | 544.2 | 605.1 | 11.2% | 625.0 | 604.1 | 3.5% |
| Electric Customers (Residential) | 51,519 | 52,615 | 2.1% | 52,392 | 51,203 | 2.3% |
| Electric Customers (Commercial) | 4,714 | 4,840 | 2.7% | 4,788 | 4,696 | 2.0% |
| Natural Gas Customers (Residential) | 47,812 | 48,582 | 1.6% | 48,640 | 47,465 | 2.5% |
| Natural Gas Customers (Industrial) | 87 | 86 | -1.1% | 86 | 87 | -1.3% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,367 | 45,935 | 1.3% | 45,675 | 45,215 | 1.0% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,498 | 10,999 | 4.8% | 10,713 | 10,514 | 1.9% |

[r] Revised [n]a Not available [fo] Forecast

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U. S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics
[2] Obtained from Utah Construction Report
[3] Includes services by nonprofit and religious institutions
[4] Includes public schools and college institutions

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BETHESDA, MARYLAND 20814

## NATIONAL DATA

| | June 1986 | June 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,175.6 | 4,447.7 | 6.5% | 4,331.2 | 4,100.8 | 5.6% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,481.9 | 3,723.2 | 6.9% | 3,600.6 | 3,392.2 | 6.1% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 124.2 | 128.8 | 3.7% | 126.5 | 124.9 | 1.3% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 375.9 | 392.0 | 4.3% | 381.9 | 383.1 | -0.3% |
| Index of Leading Indicators (1967=100) | 178.4 | 191.8 | 7.5% | 184.8 | 173.7 | 6.4% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1967=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 327.9 | 340.1 | 3.7% | 333.2 | 326.0 | 2.2% |
| CPI-U (All Urban Consumers) Food & Beverages | 309.5 | 325.4 | 5.1% | 318.9 | 313.2 | 1.8% |
| CPI-U (All Urban Consumers) Housing | 361.2 | 371.3 | 2.8% | 364.8 | 356.0 | 2.5% |
| CPI-U (All Urban Consumers) Transportation | 308.6 | 316.7 | 2.6% | 310.6 | 316.7 | -1.9% |
| CPI-U (All Urban Consumers) Medical Care | 432.0 | 461.3 | 6.8% | 448.4 | 417.8 | 7.3% |
| CPI-U (All Urban Consumers) Energy | 380.6 | 380.6 | 0.0% | 358.3 | 408.9 | -12.4% |
| Producer Price Index (not seasonally adjusted) (1967=100) | | | | | | |
| Producer Price Index, All Finished Goods | 288.9 | 296.8 | 2.7% | 291.6 | 292.4 | -0.3% |
| GNP Price Deflator (1982=100) (qtly.) | 114.0 | 117.2 | 2.8% | 115.9 | 113.2 | 2.4% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 118.1 | 119.5 | 1.2% | 118.8 | 116.6 | 2.0% |
| Total Civilian Employment (mil.) | 109.7 | 112.2 | 2.3% | 110.9 | 108.3 | 2.4% |
| Unemployment Rate | 7.1 | 6.1 | -14.1% | 6.7 | 7.1 | -6.1% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 21,649.2 | 24,712.0 | 14.1% | 19,883.1 | 18,966.2 | 4.8% |
| Residential | 10,976.9 | 10,986.4 | 0.1% | 9,665.4 | 9,183.7 | 5.2% |
| Nonresidential | 6,760.9 | 8,227.2 | 21.7% | 6,632.2 | 6,442.2 | 3.0% |
| Non-Building | 3,911.4 | 5,498.4 | 40.6% | 3,560.5 | 3,340.4 | 6.6% |
| New Dwelling Units (no.) | 160,846 | 143,985 | -10.5% | 133,265 | 144,321 | -7.7% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 6.21 | 5.69 | -8.4% | 5.54 | 6.82 | -18.8% |
| Long Term (30-year Treasury bond yields) | 8.23 | 8.63 | 4.9% | 7.99 | 9.38 | -14.9% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 8.50 | 8.25 | -2.9% | 7.73 | 9.24 | -16.4% |
| Mortgage Rates (new homes) | 9.74 | 9.05 | -7.1% | 9.29 | 10.34 | -10.2% |

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

F.W. Dodge Report, McGraw-Hill: National Construction Data.

Survey of Current Business, U.S. Department of Commerce: New Home Mortgage Rates.

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Indexes.

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# IMMIGRATION AND THE UTAH ECONOMY

Garth Mangum and Gaylen Chandler*

The nation's growing dependence on immigration as a source of labor force growth is a matter of great concern -- fueled by the persistently below-replacement birth rates of recent years in the United States. That concern undoubtedly contributed to the structuring of the amnesty rules and the agricultural labor provisions of the Immigration Reform and Control Act of 1986.

Studies in California and other states have reached the conclusion that immigration has been a positive factor in economic development and job creation. Although many immigrants are not at the bottom of the skill ladder, a substantial proportion are. The availability of these productive but low paid workers is thought by a number of economists to aid business expansion, creating enough higher skilled jobs for U.S. nationals to compensate for those which are lost to immigrants. In that atmosphere, it appears useful to assess to the extent possible the impact of immigration on the Utah economy.

## A Rising Tide

From 1930 to 1970, immigration played a minor role in U.S. population growth. Then with changes in legislation in the 1960s, the aftermath of the war in Indochina and the persistent differentials in wages and employment opportunities between the United States and Latin America, the scene changed markedly. Just the legal immigration of 4.5 million people between 1970 and 1980 was the largest intercensal increase since 1930 and comprised nearly one-fifth of the population growth of the period. The number of illegal aliens in the U.S. is estimated to be between three and nine million. If one assumes that two million entered illegally during the 1970s, one-quarter of the population growth and one-third of the labor force growth in the nation would have been immigrants. The current population growth rates will not be known for certain until the 1990 census, but there is little reason to think the immigration component has slowed appreciably.

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### Table 1

### Distribution of the Foreign-Born Population by State Throughout the United States, 1980 (in thousands)

| State | Population of State (000) | Entering the Country 1970-1979 | In Country Before 1970 | Total Foreign-Born Population | Percent of Total[a] |
|---|---|---|---|---|---|
| Alabama | 3,894 | 16 | 23 | 39 | 1.0 |
| Alaska | 402 | 6 | 10 | 16 | 4.0 |
| Arizona | 2,718 | 59 | 104 | 163 | 6.0 |
| Arkansas | 2,286 | 9 | 13 | 22 | 1.0 |
| California | 23,668 | 1,804 | 1,775 | 3,579 | 15.1 |
| Colorado | 2,890 | 47 | 67 | 114 | 3.9 |
| Connecticut | 3,108 | 66 | 202 | 268 | 8.6 |
| Delaware | 594 | 5 | 14 | 19 | 3.2 |
| Washington, D.C. | 638 | 21 | 20 | 41 | 6.4 |
| Florida | 9,746 | 326 | 732 | 1,058 | 10.9 |
| Georgia | 5,463 | 39 | 52 | 91 | 1.7 |
| Hawaii | 965 | 70 | 11 | 81 | 8.4 |
| Idaho | 944 | 9 | 14 | 23 | 2.4 |
| Illinois | 11,427 | 341 | 483 | 824 | 7.2 |
| Indiana | 5,490 | 33 | 69 | 102 | 1.9 |
| Iowa | 2,914 | 19 | 29 | 48 | 1.6 |
| Kansas | 2,364 | 23 | 25 | 48 | 2.0 |
| Kentucky | 3,661 | 15 | 20 | 35 | 1.0 |
| Louisiana | 4,206 | 40 | 45 | 85 | 2.0 |
| Maine | 1,125 | 6 | 37 | 43 | 3.8 |
| Maryland | 4,217 | 86 | 109 | 195 | 4.6 |
| Massachusetts | 5,737 | 144 | 357 | 501 | 8.7 |
| Michigan | 9,262 | 105 | 312 | 417 | 4.5 |
| Minnesota | 4,076 | 39 | 68 | 107 | 2.6 |
| Mississippi | 2,521 | 10 | 13 | 23 | .9 |
| Missouri | 4,917 | 29 | 56 | 85 | 1.7 |
| Montana | 787 | 4 | 15 | 19 | 2.4 |
| Nebraska | 1,570 | 11 | 20 | 31 | 2.0 |
| Nevada | 800 | 22 | 32 | 54 | 6.8 |
| New Hampshire | 921 | 6 | 35 | 41 | 4.5 |
| New Jersey | 7,365 | 255 | 502 | 757 | 10.3 |
| New Mexico | 1,303 | 23 | 29 | 52 | 4.0 |
| New York | 17,558 | 833 | 1,556 | 2,389 | 13.6 |
| North Carolina | 5,882 | 32 | 46 | 78 | 1.3 |
| North Dakota | 653 | 4 | 11 | 15 | 2.3 |
| Ohio | 10,798 | 73 | 229 | 302 | 2.8 |
| Oklahoma | 3,025 | 31 | 25 | 56 | 1.9 |
| Oregon | 2,633 | 40 | 67 | 107 | 4.1 |
| Pennsylvania | 11,864 | 99 | 302 | 401 | 3.4 |
| Rhode Island | 947 | 28 | 56 | 84 | 8.9 |
| South Carolina | 3,122 | 18 | 28 | 46 | 1.5 |
| South Dakota | 691 | 2 | 7 | 9 | 1.3 |
| Tennessee | 4,591 | 21 | 27 | 48 | 1.0 |
| Texas | 14,229 | 447 | 409 | 856 | 6.0 |
| Utah | 1,461 | 21 | 29 | 50 | 3.5 |
| Vermont | 511 | 4 | 17 | 21 | 4.1 |
| Virginia | 5,347 | 88 | 89 | 177 | 3.3 |
| Washington | 4,132 | 84 | 155 | 239 | 5.8 |
| West Virginia | 1,949 | 7 | 15 | 22 | 1.1 |
| Wisconsin | 4,705 | 31 | 94 | 125 | 2.7 |
| Wyoming | 470 | 4 | 6 | 10 | 2.1 |
| **Total** | 226,547 | 5,555 | 8,461 | 14,016 | 6.2 |

Source: Bureau of the Census, General Social and Economic Characteristics, Utah, (1980, Table 196).

[a] Density of foreign-born population. Foreign-born population divided by total population of the state.

## The Utah Share

Utah has not shared in that rate of immigration, however, legal or illegal. Utah's population as counted by the census grew from 1.06 million to 1.46 million, adding 400,000 during the 1970s. Of that, only 21,500 or 5 percent, were immigrants. Officials of the Immigration and Naturalization Service estimate that about 25,000 illegal aliens reside in the state, most of whom are believed to have arrived since 1970. About 10,000 of those are presumed to be eligible for legalization under the 1986 legislation. Of course, immigration to Utah and to the United States did not begin in 1970. Table 1 shows the foreign-born population by state and proportion separated between those entering the United States before and after 1970.

## Origins and Destinations

Seventy-two percent of all the increase in the foreign-born population in the U.S. was focused on six states: California, New York, Illinois, New Jersey, Florida and Texas. With those states excepted, Utah's 3.5 percent foreign born is about typical for the rest of the nation.

In Utah, as well as the balance of the country, the countries of foreign-born origin changed markedly about 1970. Historically, Europe had been the principal source. During the 1970s, 1.3 million of the total legal entrants to the United States were from Mexico and 900,000 from elsewhere in Central America. Whereas Asian immigration had been practically nonexistent for nearly 100 years, 1.8 million arrived from that part of the world during the 1970s, mostly from the Philippines, Korea and Vietnam. Of course, Mexico and Central America were the sources of the bulk of illegal entrants into the country.

For Utah, the pattern was quite different. Of the total of 50,451 foreign-born persons in the state, 21,573 arrived during the 1970s. Of those who came before 1970, 62 percent were Europeans, 20 percent Latin Americans and 7.2 percent Asians. In the post-1970 immigration, 13 percent were Europeans, 1 percent Mexicans, 5 percent Central and South Americans and 8.2 percent Canadians. A full 42 percent came from Asia, predominately from Vietnam, Laos, Thailand and Cambodia. Why Utah became the destination of so many more than its share of Indochinese immigrants is not readily apparent, but that fact has been important in determining their economic impact.

Just as foreign-born persons are not distributed evenly throughout the United States, neither are they distributed evenly throughout Utah. As can be seen in Table 2, the numerical majority are in Salt Lake County, which also has the highest percentage of foreign-born population in the state. The principal trend is a relatively higher density of the foreign-born population in metropolitan areas. However, both Carbon and Millard Counties are minor exceptions to this trend, consequent to mining and other major projects therein.

## Demographic Characteristics

The economic consequences of immigration differ substantially depending upon the demographic characteristics of the newcomers.

### Age

For most of the nation, the foreign born are younger than the national average. That is not true in Utah with its high birth rate and relatively young population. Of the total Utah population, 34 percent are under 15 years of age compared to 12 percent of the foreign born. At the other end of the scale, 18 percent of Utah's foreign born are over 65 years of age compared to only 8 percent of the native born. The result is a labor force anomaly: 65 percent of the native population over 16 years of age are labor force participants compared to 55 percent of the foreign born. Yet 48 percent of the foreign-born population – 52 percent of the pre-1970 group and 42 percent of those arriving after 1970 – are labor force participants compared to only 44 percent of the total native-born population. Because of this effect, the foreign born are 3.5 percent of Utah's population but 3.9 percent of its labor force.

### Sex

In the nation as a whole the immigrants are predominately male whereas in Utah the mix is about even for those who arrived after 1970. For the earlier arriving group, of course, the longer life expectancy of women tips the balance in their direction.

## Table 2

## Distribution of Foreign-Born Persons by County, Utah, 1980

| County | Europe | Asia | Canada | Mexico | Other | Foreign-Born Total | Pop. of County | Percent Foreign-Born |
|---|---|---|---|---|---|---|---|---|
| Beaver | 25 | 8 | 4 | 11 | 5 | 53 | 4,378 | 1.2 |
| Box Elder | 246 | 92 | 65 | 189 | 48 | 640 | 33,222 | 1.9 |
| Cache | 496 | 917 | 156 | 43 | 460 | 2,072 | 57,176 | 3.6 |
| Carbon | 326 | 54 | 23 | 186 | 116 | 705 | 22,179 | 3.2 |
| Daggett | | | 2 | | 0 | 2 | 769 | .3 |
| Davis | 2,061 | 1,181 | 329 | 205 | 612 | 4,388 | 146,540 | 3.0 |
| Duchesne | 53 | 27 | 6 | 3 | 0 | 89 | 12,565 | .7 |
| Emery | 48 | 29 | 21 | 33 | 35 | 166 | 11,451 | 1.4 |
| Garfield | 5 | 6 | 5 | 8 | 3 | 27 | 3,673 | .7 |
| Grand | 77 | | 33 | 8 | 13 | 131 | 8,241 | 1.6 |
| Iron | 87 | 56 | 32 | 56 | 9 | 240 | 17,349 | 1.4 |
| Juab | 49 | | 13 | 7 | 56 | 125 | 5,530 | 2.3 |
| Kane | 14 | 3 | 28 | | 4 | 49 | 4,024 | 1.2 |
| Millard | 41 | 142 | 22 | 57 | 56 | 318 | 8,970 | 3.5 |
| Morgan | 21 | | 2 | | 24 | 47 | 4,917 | 1.0 |
| Piute | | | | 2 | 0 | 2 | 1,329 | .2 |
| Rich | 4 | | 3 | 4 | 10 | 21 | 2,100 | 1.0 |
| Salt Lake | 12,674 | 6,243 | 2,004 | 1,986 | 5,033 | 27,940 | 619,066 | 4.5 |
| San Juan | 40 | 14 | 31 | 35 | 75 | 195 | 12,253 | 1.6 |
| Sanpete | 66 | 79 | 23 | 94 | 29 | 291 | 14,620 | 2.0 |
| Sevier | 60 | 6 | 27 | 15 | 14 | 122 | 14,727 | .8 |
| Summit | 72 | 11 | 43 | | 18 | 144 | 10,198 | 1.4 |
| Tooele | 312 | 45 | 26 | 121 | 51 | 555 | 26,033 | 2.1 |
| Uintah | 52 | 30 | 13 | | 11 | 106 | 20,506 | .5 |
| Utah | 1,509 | 1,089 | 1,771 | 690 | 1,847 | 6,906 | 218,106 | 3.2 |
| Wasatch | 53 | 5 | 20 | 8 | 27 | 113 | 8,523 | 1.3 |
| Washington | 204 | 65 | 87 | 74 | 78 | 508 | 26,065 | 1.9 |
| Wayne | 12 | 5 | 2 | | 0 | 19 | 1911 | 1.0 |
| Weber | 2,090 | 1,019 | 341 | 386 | 641 | 4,477 | 144,616 | 3.1 |
| Total | 20,697 | 11,126 | 5,132 | 4,221 | 9,275 | 50,451 | 1,461,037 | 3.5 |

Source: Bureau of the Census, *General Social and Economic Characteristics, Utah*, 1980, Table 238.

## Education

Educationally, the native-born population is homogeneous and the foreign-born more diverse. Only 1.3 percent of the native-born population over 25 years of age had four or less years of elementary school as compared to almost 10 percent of the foreign-born population that entered the U.S. between 1970 and 1980, and 5 percent of the foreign-born population that entered before 1970. On the other end of the spectrum, 15 percent of those who immigrated between 1970 and 1980 had five or more years of college, as compared to 9 percent for the native-born population and 8 percent for those foreign born who immigrated before 1970. At the time of the 1980 census, there were slightly more than 21,000 persons enumerated who said they had entered the country after 1970. Data from the Office of the Commissioner of Higher Education showed that there were just less than 2,000 students registered as non-resident aliens in 1970. This number increased to just over 3,000 in 1979. Therefore, 3,000 of the 21,000 foreign-born persons who entered the U.S. after 1970 and were in Utah in 1979 were actually attending college, registered as non-resident aliens. This fact accounts for much of the diversity in educational attainment among the foreign born.

Over 80 percent of the native-born population 25 years of age and over have at least a high school diploma compared to 72 percent of the foreign-born population in the same age category. However, after having completed high school, foreign-born individuals were more likely to complete college and work for advanced degrees. The data shows that immigrants from Canada were significantly better educated than the native-born population. It should be noted, however, that a substantial proportion of the Canadian-born group came here to go to college.

Those who came from Mexico during the 1970s were significantly less well educated than the native born, with 45 percent not having completed high school, and 10 percent with four or more years of college. The foreign born from Asia showed more diversity with 31 percent not having completed high school, but also 29 percent with four or more years of college.

## Economic Status

The economic status of the pre- and post-1970 entrants also differs significantly.

## Income

There is little difference in personal income between the native population and the pre-1970 foreign-born entrants. However, the household income of the pre-1970 group suffers from their higher average age. Incomes are markedly lower for those who entered the U.S. during the 1970s. One reason for this is that the 3,000 nonresident alien students are forbidden to work as part of the terms of their visas (Table 3).

## Employment and Unemployment

As noted, the higher average age of the foreign born is one reason for their comparatively low household income. Since both immigrant groups have a higher number of 65 and older members and also because nonresident alien students are forbidden to work, they have more families without workers (Table 4). These factors, along with the smaller average family size of the post-1970 entrants, which limits the number of families with three or more workers, account for all of the significant differences.

In 1980, Utah had a 5.5 percent unemployment rate. This compares to a 7.5 percent rate for those foreign born who entered the country between 1970 and 1980. The rate was particularly high for Asian women who entered the country between 1975 and 1980, and also Mexican men who immigrated during the same time period. However, those who entered the country before 1970 had only a 3.1 percent unemployment rate.

Another significant factor in the income differentials is the stability of employment, once attained. Those foreign born in Utah who entered the U.S. before 1970 worked more weeks, more hours and had significantly less unemployed time during the year than the native-born labor force. Those who entered between 1970 and 1980 worked less weeks and hours with more unemployed time than those who were native born.

## Occupations

Again the occupational distribution of those who immigrated to Utah before 1970 differs little from the native born (Table 5). The 1970s immigrants are substantially lower on the occupational scale, though there is a high proportion in the

## Table 3

### Household Income Compared for Native-Born vs. Foreign-Born Groups (percent)

| 1979 Income | Native | 1970-79 Immigrants | Pre-1970 Immigrants |
|---|---|---|---|
| Less than $5,000 | 9.5 | 24.0 | 15.0 |
| $5,000-$7,499 | 7.0 | 12.0 | 12.0 |
| $7,500-$9,999 | 7.5 | 10.0 | 9.0 |
| $10,000-$14,999 | 16.0 | 17.0 | 15.0 |
| $15,000-$19,999 | 16.0 | 15.0 | 14.0 |
| $20,000-$24,999 | 15.0 | 8.0 | 12.0 |
| $25,000-$34,999 | 17.0 | 7.0 | 14.0 |
| $35,000-$50,000 | 8.4 | 3.5 | 7.5 |
| More than $50,000 | 3.6 | 2.7 | 3.0 |
| Median | $17,858 | $11,057 | $14,824 |
| Mean | $20,474 | $14,062 | $17,904 |

Source: Bureau of the Census, General Social and Economic Characteristics, Utah, 1980, Table 196.

## Table 4

### Number of Workers per Family, Native-born Population Compared to Foreign-born Population (percent)

| Number of Workers | Native | 1970-1979 Immigrants | Pre-19790 Immigrants |
|---|---|---|---|
| None | 8.4 | 11.8 | 18.0 |
| 1 | 34.0 | 36.0 | 33.0 |
| 2 | 44.0 | 43.0 | 36.0 |
| 3 or more | 13.7 | 9.5 | 13.0 |
| Mean | 1.7 | 1.6 | 1.5 |

Source: Bureau of the Census, General Social and Economic Characteristics, Utah, 1980, Table 196.

Table 5

Occupational Comparisons of Native-born
vs. Foreign-born Workers, 1980

| | Native Born | Percent[a] | 1970-79 Immi-grants | Percent[a] | Pre-1970 Immi-grants | Percent[a] |
|---|---|---|---|---|---|---|
| Managerial and Professional Specialty Occupations | 133,794 | 24 | 1,858 | 23 | 3,843 | 27 |
| Technical, Sales and Admin. Support Occupations | 173,080 | 31 | 1,440 | 17 | 3,968 | 28 |
| Service Occupations | 67,391 | 12 | 1,605 | 19 | 2,198 | 15 |
| Farming, Forestry and Fishing Occupations | 12,433 | 2 | 256 | 3 | 254 | 2 |
| Precision Production, Craft and Repair Occupations | 86,302 | 15 | 899 | 11 | 1,976 | 14 |
| Operators, Fabricators and Laborers | 90,386 | 16 | 2,197 | 27 | 2,041 | 14 |
| Total | 563,386 | 100 | 8,255 | 100 | 14,280 | 100 |

Source: Bureau of the Census, General Social and Economic Characteristics, Utah, 1980, Table 196.

[a] Total number of workers in each occupation divided by total of native born, immigrated 1970-1979, and immigrated before 1970 respectively.

managerial and professional category. Despite the perception that an inordinate proportion of the recent immigrants are involved in small businesses, only 3.1 percent of the 1970-80 foreign born are self employed compared to 6.2 percent of the native population and 7.1 percent of the pre-1970 foreign born.

## Economic Impact of Utah's Immigrants

The 1986 immigration legislation was a compromise between those fearful that the immigrants were taking jobs and income from U.S. nationals while imposing undue burdens on the welfare and education system, and those relying upon immigrants as major proportions of their work force. Little is known about the relative costs and benefits to the economy, particularly in Utah, but some speculation is possible based on studies in other states.

### Do Immigrants Take Jobs from Native Workers?

The issue is whether aliens are substitutes or complements for U.S. workers. Are there only so many jobs so that every hire of a foreign born equals one less native born hired? Are there jobs that U.S. workers will not do at wages employers can afford to pay so that each low-paid hire of an alien is a net increase in employment? Does the increase in residents increase the demand for goods and services and, therefore, the total amount of employment? Does an increase in the supply of low paid jobs filled by immigrants increase the demand for managerial, supervisory, technical and skilled jobs to support the unskilled ones? Studies in Texas have found no significant correlation between the presence of Mexican workers and the local unemployment level. California studies have been able to identify no negative effects of immigration on the employment of non-immigrants in those labor markets. Since California has been able to identify no net job loss despite the absorption of two million legal and an unknown number of illegal immigrants during the last decade, it is assumed that no negative effects would be found in Utah. Positive impacts would be even more difficult to prove.

### Do Immigrants Depress Wage Rates?

The relationship between immigration and wages is extremely complex, because those effects would vary considerably across different sectors of the labor market. It is common in the literature to segment the labor market into primary and secondary markets. The immigrant population in Utah is more heavily weighted toward the laborer's sector of the labor market, and would be expected to have the greatest effect there. Many hold jobs at the lower end of the "primary" market, which would include low skilled workers in the major industries. Others, however, hold jobs in the secondary market where there is little hope for advancement, no wage regulation (except minimum wage) and no job security. There is little evidence that employers violate wage regulations in the hiring of alien workers, even those who are in the country illegally. In 1982 almost 90 percent of undocumented workers sampled by the Immigration and Naturalization Service earned minimum wage or more.

The evidence suggests that there is in fact some decrease in wages because of immigration. Muller and Espenshade (1985) concluded that the presence of Mexicans and other immigrant groups reduces the average wage paid in manufacturing and some services in California. This reduction primarily reflects the increasing share of Hispanics in the work force, since the wage rate for Hispanics is typically lower than for non-Hispanics in similar occupations. They also concluded that the presence of immigrants had somewhat depressed the wages for non-Hispanics working as laborers, but that the effects of immigrants on the wages for semi-skilled and skilled laborers appeared to be negligible. Although there may be some discrimination, the principal reasons why immigrants received lower wages are that they are less likely to be unionized and they have less experience and education than other workers. Thus, in Utah, the influx of Southeast Asians has probably had a slight dampening effect on wages in the low-skill sectors.

That impact will differ significantly by occupations and industry. Of the post-1970 immigrants into Utah, 23 percent are professionals. Studies have found no negative impacts on income in the professional class. Therefore, it will be assumed that there is no negative impact for the professional group. The remainder of the more recent immigrants is most heavily concentrated in service and labor occupations. The labor intensive industries are most likely to employ immigrants at relatively low wage rates. The influx of alien workers has slightly depressed the wage rates in those industries. Substantial numbers of the recent immigrants, legal and illegal, are employed in hotels, motels, restaurants, landscaping and agriculture. Another significant portion are employed as laborers and assemblers in manufacturing industries. The past effects in these industries have been to depress the wage paid, and therefore the cost of goods and services. However, in Utah, there is such a small proportion of immigrants in the work force, that any depression of wages would be minimal. Those businesses with local markets are likely to be affected only slightly, since all other businesses in the same markets (hotels, restaurants, landscaping, etc.) will be affected in the same way and no significant advantage or disadvantage would accrue to any. Therefore, the new immigration bill, legalizing some aliens and imposing penalties for hiring those not legalized, will have very little long-term effect on these businesses and industries.

### Competitive Consequences

Those manufacturers who employ large quantities of recent immigrants as operators, fabricators and laborers gain an advantage in the price of labor. Those companies who compete on a regional, national or international basis would be more competitive with a large part of the labor force being recent immigrants. Utah has such a small proportion (only 2.4 percent of the people employed in these occupations are immigrants), of the labor force being recent immigrants, that there are very minimal benefits to businesses in Utah. Since it is concluded that immigrant labor has not created a significant competitive advantage for businesses in Utah, the change in the immigration law will have very little effect on Utah's economy. If anything, the increase in wages in areas of the country where there have been sizeable populations of immigrants, will create positive benefits for labor intensive industries in Utah.

### Labor Shortages?

Illegal aliens have played a significant role in the harvest of Utah's fruit crops. The current legislation attempts to continue to allow this group of workers to function. In June there was a feared shortage of pickers for the cherry crop in Utah. However, there is no indication that any of the crop was lost for that reason. That is in contrast to Oregon where a shortage of strawberry pickers caused the loss of one-third of the $30 million strawberry harvest. There was sufficient impact in Utah's labor supply to cause some upward pressure on wages. The pressure on wages has also been applicable to fruit growers in other parts of the country, and therefore, should not reduce the chance for fruit growers in Utah to remain competitive.

### Fiscal Impacts

Foreign-born persons are both taxpayers and consumers of public services. How does the balance between taxpaying and service receiving compare for the native born and foreign born?

Table 6 provides some estimates for per capita payment of taxes. On a per capita basis, Utahns contributed 68 percent of the national average toward federal income taxes. Therefore, it is estimated that of $581 million in intergovernmental transfer payments from the federal government to state and local governments, 68 percent or $395 million came from Utah taxpayers. Estimates of foreign-born contributions were derived by dividing household income by the number of persons per household in each foreign-born group to establish per capita income, then multiplying the ratio of per capita foreign-born income to per capita total income by the average per capita taxes paid. This is considered to be a rough estimate, and is intended to give some idea of the relative contributions of the represented groups.

Table 7 provides estimates for the costs of benefits used, and Tables 6 and 7 are not directly comparable. Estimates for both foreign-born groups on education through high school were derived by multiplying the ratio of foreign-born persons aged 5-19 to the total number of persons in each respective group by the average for the total population in the first column. The cost of higher education for the pre-1970 entrants was determined simply by comparing ages of persons aged 20-34 with the total population. The age distribution for those age groups is very similar. Other analysis has suggested that the pre-1970 group is very similar to the total population in all aspects except for the age distribution. It is not likely that these students would be listed as "foreign students," because of the length of time they have been in the U.S. Since the age distribution is similar, the cost of education is concluded to also be very similar.

Approximately 3,000 students were listed as foreign-born attending Utah universities in the 1979-80 school year. However, only about two-thirds of these students were enrolled in state-funded institutions. Approximately 50,000 students were enrolled in state-funded institutions, or about 3.5 percent of

Table 6

Estimates for Taxes Contributed
by the Foreign-Born Population of Utah

| | Revenue Received (millions) | Average per Capita Taxes Paid[b] | Average per Capita Contributions by Pre-1970 Entrants[c] | Average per Capita Contributions by 1970-1980 Entrants[c] |
|---|---|---|---|---|
| From Federal Government[a] | $395 | $281 | $370 | $207 |
| Property Tax | 343 | 243 | 321 | 179 |
| General Sales Tax | 396 | 280 | 369 | 206 |
| State Income Tax | 306 | 217 | 170 | 95 |
| Other | 183 | 129 | 286 | 159 |
| Total | $1,583 | $1,150 | $1,516 | $ 846 |

Source: Revenue Received--Bureau of the Census, Governmental Finances, GF80, 1970-80, Table 5.

[a] Bureau of the Census, Statistical Abstract of the United States, 1986, Table 516.
[b] Revenue received/total population.
[c] Bureau of the Census, General Social and Economic Characteristics, Utah, 1980, Table 196.

Table 7

Average per Capita Costs of Benefits for the Total Population. Pre-1970 Foreign-Born Entrants, and 1970-1980 Foreign-Born Entrants

| | Total Population[a] | Pre-1970 Entrants | 1970-1980 Entrants |
|---|---|---|---|
| Education Through High School[b] | $ 479 | $ 75 | $ 482 |
| Higher Education[c] | 236 | 236 | 472 |
| Public Welfare, High Estimate | 129 | 129 | 129 |
| Hospitals | 102 | 102 | 102 |
| Highways | 191 | 191 | 191 |
| Police | 50 | 50 | 50 |
| Fire | 20 | 20 | 20 |
| Interest on Debt | 50 | 50 | 50 |
| Other | 357 | 357 | 357 |
| Total | $1,614 | $1,200 | $1,1853 |

[a] Bureau of the Census, Governmental Finances. GF80, No. 5, 1980, Table 24.

[b] Age data: Bureau of the Census, Selected Social and Economic Characteristics, Utah, 1980, Table 196.

[c] Source of enrollment data: Utah State Board of Higher Education, Annual Report to the Governor and Legislature, "Planning and Enrollment," 1979-1980, Tables 3 and 5.

the total population of the state. On the other hand, about 10 percent of all recent foreign-born entrants to the state were students in state-funded universities. Many of these students are teaching assistants, teaching classes in technical fields at a comparatively low wage rate. The initial data suggest that if the 1970-1980 entrants were footing the entire bill, the cost for them per capita would be almost triple. Since no data is available to suggest the dollar value of benefits received from foreign students, the figure for per capita costs of benefits for the foreign born in higher education has been estimated at double the state average. This is a somewhat arbitrary estimate, and little more than a guess. However, the estimate does give some idea of the possible costs.

New entrants pay fewer taxes than the native population and the pre-1970 immigrants. The pre-1970 immigrants, however, pay more taxes per capita. The estimates may be biased upward for the pre-1970 immigrants because their native-born children are counted as native-born citizens, and this estimating procedure deals with per capita rather than household or family income. If the native children of immigrants were also counted in the immigrant group, it would cause the per capita income to decrease, and thus the per capita taxes. Nevertheless, these calculations provide a reasonable estimate of the comparative tax contribution of immigrants.

The perception that foreign-born persons are heavy users of welfare is not supported by survey data or service provider reports (Table 7). Studies show that recent immigrants receive substantially less in public welfare than comparable low income populations. One hypothesis is that recent immigrants do not know what is available. nor how to work the system. Service provider reports estimate the costs of providing services to persons whose birthplace and legal status are undetermined. Therefore, it is concluded that actual welfare use by

Utah immigrants is somewhere between substantially below and no more than that of the general population in the same income range.

There are no data to document the use of hospitals, highways, police or interest on state debt; therefore they are assumed to be used at the same rate by immigrants as by the general population.

It is concluded that recent entrants use more public services than they pay for in taxes. However, most of the unpaid-for services being used are in education. After being in the country for several years, immigrants in Utah contribute substantially more in taxes than they receive in services. A serious problem will arise only when sharp increases in the inflow of foreign born outweigh the contributions of those foreign born who have been in the state for some time. Although recent immigrants do consume more in state services than they contribute in taxes, the difference is not great and would not have a major negative fiscal impact.

However, this conclusion is reached only on the basis of legal immigrants for whom there are data. It does not include impacts of illegal aliens. The literature suggests that illegal aliens are typically young males who have taxes withheld, but consume very few services. INS estimates that there may be 25,000 illegal aliens in the state. However, fewer than one thousand (as of August 1987) have come forward to claim legal status under the amnesty provision of the 1986 immigration legislation. Whatever the numbers, it would be expected that illegal aliens contribute substantially more in taxes than they receive in services.

## Summary

In summary, the foreign-born population of Utah increased dramatically during the 1970s. Labor market characteristics of pre-1970 immigrants are very similar to the native-born population. There are appreciable differences, however, between the native-born population and the more recent entrants. The age distribution of those who entered the country between 1970 and 1980 is more heavily weighted in the prime working years than the distribution of the native-born population. As a result, even though in Utah immigrants had a slightly lower labor force participation rate than the native born, they accounted for 3.9 percent of the labor force and only 3.5 percent of the population.

Recent entrants, on the one hand, were more likely to have four or more years of college than the native-born population. On the other hand, they were also more likely to have less than a high school education.

The characteristics of high educational achievement for a large proportion of the recent entrants to the country place that group typically in professional and skilled occupations where no wage dampening effects have been encountered. However, because many immigrants are poorly educated, they work in unskilled jobs where their presence may have some downward impact on the overall level of wages paid in that sector of the labor market. That effect would be minimized by the relatively small proportion of immigrants in the population.

Persons who legally entered the country recently use more in state-financed services than they provide in tax revenues. However, those who have been here for some time provide more in taxes than they consume in benefits. The illegal immigrants probably pay substantially more in taxes than they use in public services. After being in the state for a period of several years, Utah's immigrants assume demographic and economic characteristics very similar to the native-born population. At Utah's modest rate of immigration there is no evidence of substantial negative impact. Bringing with them a new set of experiences and the willingness to work productively for modest pay, Utah, on balance, appears to benefit substantially from its new arrivals.

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# Utah Business Statistics

| UTAH DATA | June 1986 | June 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 17,879 | NA | NA | NA | 17,633.8 | NA |
| New Corporations (no.) | 445 | 507 | 13.9% | 453 | 454 | -0.3% |
| New Car, Truck and Motorhome Sales (no.) | 6,037 | NA | NA | NA | 6,295 | NA |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 51.00 | 66.50 | 30.4% | 60.03 | 53.68 | 11.8% |
| Lambs (cwt) | 69.40 | 76.80 | 10.7% | 70.10 | 64.99 | 7.9% |
| Milk Wholesale (cwt) | 11.20 | 11.40 | 1.8% | 12.01 | 11.63 | 3.2% |
| Alfalfa Hay, Baled (per ton) | 71.00 | 69.00 | -2.8% | 64.25 | 71.06 | -9.6% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 37,409 | 39,501 | 5.6% | 39,261 | 35,212 | 11.5% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 244,093 | 210,246 | -13.9% | 123,912 | 140,747 | -12.0% |
| Residential | 75,317 | 66,920 | -11.1% | 58,311 | 60,516 | -3.6% |
| Nonresidential | 139,490 | 56,391 | -59.6% | 38,644 | 51,505 | -25.0% |
| Public Works and Utilities | 29,286 | 86,935 | 196.8% | 26,957 | 28,968 | -6.9% |
| Total Permit Construction (thous. of dol.) [2] | 146,093.8 | 95,014.8 | -35.0% | 101,190.7 | 124,259.9 | -18.6% |
| Residential | 76,895.5 | 50,311.4 | -34.5% | 52,560.4 | 62,047.0 | -15.3% |
| Nonresidential | 50,827.3 | 27,991.5 | -44.9% | 35,322.3 | 47,748.5 | -26.0% |
| Additions, Alterations and Repairs | 18,653.4 | 16,711.9 | -10.4% | 13,305.0 | 13,987.9 | -4.9% |
| New Dwelling Units (no.) | 1,734 | 727 | -58.1% | 857 | 1,272 | -32.6% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 750.8 | 761.6 | 1.4% | 762.6 | 752.2 | 1.4% |
| Total Employed Persons | 707.0 | 712.3 | 0.7% | 714.4 | 709.6 | 0.7% |
| Unemployed Persons | 40.9 | 49.3 | 20.5% | 48.2 | 42.2 | 14.2% |
| Percent Total Labor Force | 5.5 | 6.5 | 18.2% | 6.3 | 5.6 | 13.3% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 636.5 | 643.2 | 1.1% | 637.7 | 632.0 | 0.9% |
| Manufacturing | 93.0 | 93.6 | 0.6% | 91.4 | 94.0 | -2.9% |
| Mining | 7.8 | 8.1 | 3.8% | 8.2 | 8.8 | -7.6% |
| Contract Construction | 35.6 | 29.6 | -16.9% | 31.1 | 35.4 | -12.2% |
| Transportaion, Communication and Utilities | 37.2 | 37.9 | 1.9% | 37.6 | 37.0 | 1.7% |
| Wholesale Trade | 36.1 | 36.5 | 1.1% | 36.2 | 35.8 | 1.0% |
| Retail Trade | 116.3 | 119.5 | 2.8% | 118.4 | 114.7 | 3.3% |
| Finance, Insurance and Real Estate | 33.1 | 34.2 | 3.3% | 33.5 | 32.0 | 4.6% |
| Services [3] | 136.2 | 143.2 | 5.1% | 140.3 | 134.7 | 4.1% |
| Federal Government | 40.8 | 39.8 | -2.5% | 40.4 | 40.0 | 1.1% |
| State Government [4] | 37.7 | 36.5 | -3.2% | 37.7 | 36.8 | 2.3% |
| Local Government [4] | 62.7 | 64.4 | 2.7% | 63.9 | 62.8 | 1.8% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 39.8 | 39.8 | 0.0% | 39.7 | 40.4 | -1.7% |
| Mining | 40.8 | 40.0 | -2.0% | 42.7 | 44.3 | -3.7% |
| Wholesale Trade | 37.3 | 38.8 | 4.0% | 37.7 | 35.7 | 5.8% |
| Retail Trade | 28.6 | 28.8 | 0.7% | 28.3 | 28.1 | 0.8% |
| Amount of Unemployment Compensation (thous. of dol.) | 6,825.1 | 7,375.1 | 8.1% | 8,890.9 | 7,640.8 | 16.4% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,361.4 | 2,476.5 | 4.9% | 2,425.7 | 2,347.6 | 3.3% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 122,472.5 | 156,747.8 | 28.0% | 129,531.1 | 125,093.1 | 3.5% |
| Sales and Use Tax | 56,912.1 | 62,358.9 | 9.6% | 46,542.8 | 45,246.2 | 2.9% |
| Motor Fuel Tax | 9,860.6 | 14,960.3 | 51.7% | 8,331.8 | 7,680.3 | 8.5% |
| Individual Income Tax | 30,044.0 | 33,916.5 | 12.9% | 44,421.1 | 37,628.5 | 18.1% |
| Corporation Franchise Tax | 508.3 | 11,481.2 | 2158.7% | 5,073.9 | 5,622.2 | -9.8% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,108.6 | 1,135.0 | 2.4% | 1,112.6 | 1,117.3 | -0.4% |
| Crude Oil to Refineries (thous. of bbls.) | 3,921.3 | 3,804.9 | -3.0% | 3,918.3 | 3,704.9 | 5.8% |
| Crude Oil (thous. of bbls.) | 2,926.0 | 2,896.1 | -1.0% | 3,045.3 | 3,465.9 | -12.1% |
| Natural Gas (mil. of cu. ft.) | 17,535.9 | 19,950.6 | 13.8% | 20,176.0 | 18,770.9 | 7.5% |
| Coal (thous. short tons) | 1,060.0 | 1,187.0 | 12.0% | 924.6 | 1,086.7 | -14.9% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 897,797 | 913,902 | 1.8% | 833,420 | 786,043 | 6.0% |
| Highway Traffic Count Across State Lines | 45,298 | 48,264 | 6.5% | 38,146 | 34,976 | 9.1% |
| Transient Room Taxes (thous. of dol.) | 1,016.3 | 582.5 | -42.7% | 437.2 | 463.8 | -5.7% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 1,733.4 | 1,977.6 | 14.1% | 1,031.1 | 956.5 | 7.8% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 468,349 | 477,221 | 1.9% | 476,240 | 467,144 | 1.9% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 167,803 | 175,281 | 4.5% | 172,214 | 166,418 | 3.5% |
| Electric Customers (Residential). | 459,233 | 467,881 | 1.9% | 467,341 | NA | NA |
| Electric Customers (Commercial) | 45,117 | 46,273 | 2.6% | 45,912 | NA | NA |
| Natural Gas Customers (Residential & Commercial) | 433,460 | 443,654 | 2.4% | 441,393 | 429,167 | 2.8% |
| Natural Gas Customers (Industrial) | 564 | 556 | -1.4% | 563 | 569 | -1.2% |

# Utah Business Statistics

| UTAH DATA | June 1986 | June 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Davis County | | | | | | |
| Non-Ag. Employment (thous.) | 54.0[r] | 54.4[fo] | 0.7% | 53.1 | 53.1 | 0.0% |
| Unemployment Rate | 4.5[r] | 5.6 | 24.4% | 5.0 | 3.9 | 27.4% |
| Auth. Permit Construction (thous. of dol.) | 27,750.0 | 12,728.7 | -54.1% | 15,104.1 | 16,345.6 | -7.6% |
| New Dwelling Units (no.) | 580 | 120 | -79.3% | 141 | 236 | -40.2% |
| Postal Receipts (thous. of dol.) | 330.1 | 347.4 | 5.2% | NA | 322.6 | NA |
| Electric Customers (Residential) | 44,843 | 47,121 | 5.1% | 46,365 | 38,974 | 19.0% |
| Electric Customers (Commercial) | 3,277 | 3,271 | -0.2% | 3,265 | 2,879 | 13.4% |
| Natural Gas Customers (Residential) | 46,153 | 48,677 | 5.5% | 47,736 | 45,209 | 5.6% |
| Natural Gas Customers (Industrial) | 50 | 86 | 72.0% | 55 | 50 | 8.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 52,955 | 54,959 | 3.8% | 54,155 | 51,230 | 5.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,123 | 10,575 | 4.5% | 10,321 | 9,847 | 4.8% |
| Salt Lake County | | | | | | |
| Non-Ag. Employment (thous.) | 331.9[r] | 338.0[fo] | 1.8% | 335.2 | 328.2 | 2.1% |
| Unemployment Rate | 5.2[r] | 5.6 | 7.7% | 5.5 | 5.6 | -1.5% |
| Auth. Permit Construction (thous. of dol.) | 75,616.3 | 43,610.0 | -42.3% | 48,835.5 | 64,781.9 | -24.6% |
| New Dwelling Units (no.) | 688 | 274 | -60.2% | 374 | 562 | -33.4% |
| Postal Receipts (thous. of dol.) | 7,116.9 | 6,786.3 | -4.6% | 7,056.1 | 7,398.3 | -4.6% |
| Electric Customers (Residential) | 229,986 | 234,279 | 1.9% | 234,064 | 227,603 | 2.8% |
| Electric Customers (Commercial) | 19,264 | 19,792 | 2.7% | 19,641 | 18,918 | 3.8% |
| Natural Gas Customers (Residential) | 211,694 | 216,415 | 2.2% | 215,413 | 209,087 | 3.0% |
| Natural Gas Customers (Industrial) | 258 | 241 | -6.6% | 249 | 259 | -3.7% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 221,901 | 226,229 | 2.0% | 224,943 | 219,852 | 2.3% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 107,632 | 109,682 | 1.9% | 108,950 | 107,091 | 1.7% |
| Utah County | | | | | | |
| Non-Ag. Employment (thous.) | 71.1[r] | 71.0[fo] | -0.1% | 71.2 | 71.5 | -0.4% |
| Unemployment Rate | 5.6[r] | 7.1 | 26.8% | 7.3 | 6.1 | 20.0% |
| Auth. Permit Construction (thous. of dol.) | 13,799.9 | 13,321.5 | -3.5% | 11,185.9 | 10,712.2 | 4.4% |
| New Dwelling Units (no.) | 162 | 96 | -40.7% | 102 | 98 | 4.2% |
| Postal Receipts (thous. of dol.) | 854.4 | 903.0 | 5.7% | 927.8 | 917.1 | 1.2% |
| Electric Customers (Residential) | 49,310 | 50,225 | 1.9% | 50,247 | NA | NA |
| Electric Customers (Commercial) | 6,189 | 6,587 | 6.4% | 6,330 | NA | NA |
| Natural Gas Customers (Residential) | 59,080 | 59,591 | 0.9% | 59,996 | 59,043 | 1.6% |
| Natural Gas Customers (Industrial) | 73 | 68 | -6.8% | 72 | 71 | 2.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 60,141 | 61,134 | 1.7% | 62,300 | 61,642 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 15,825 | 18,459 | 16.6% | 17,287 | 15,349 | 12.6% |
| Weber County | | | | | | |
| Non-Ag. Employment (thous.) | 60.0[r] | 60.9[fo] | 1.5% | 59.8 | 58.5 | 2.3% |
| Unemployment Rate | 6.5[r] | 7.7 | 18.5% | 6.8 | 5.5 | 22.1% |
| Auth. Permit Construction (thous. of dol.) | 7,603.0 | 9,470.0 | 24.6% | 9,319.5 | 8,626.8 | 8.0% |
| New Dwelling Units (no.) | 87 | 69 | -20.7% | 73 | 95 | -23.7% |
| Postal Receipts (thous. of dol.) | 544.2 | 605.1 | 11.2% | 625.0 | 604.1 | 3.5% |
| Electric Customers (Residential) | 51,519 | 52,615 | 2.1% | 52,392 | 51,203 | 2.3% |
| Electric Customers (Commercial) | 4,714 | 4,840 | 2.7% | 4,788 | 4,696 | 2.0% |
| Natural Gas Customers (Residential) | 47,812 | 48,582 | 1.6% | 48,640 | 47,465 | 2.5% |
| Natural Gas Customers (Industrial) | 87 | 86 | -1.1% | 85 | 87 | -1.3% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,367 | 45,935 | 1.3% | 45,675 | 45,215 | 1.0% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,498 | 10,999 | 4.8% | 10,713 | 10,514 | 1.9% |

[r] Revised   [na] Not available   [fo] Forecast

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U. S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics

[2] Obtained from Utah Construction Report

[3] Includes services by nonprofit and religious institutions

[4] Includes public schools and college institutions

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| NATIONAL DATA | June 1986 | June 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,175.6 | 4,447.7 | 6.5% | 4,331.2 | 4,100.8 | 5.6% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,481.9 | 3,723.2 | 6.9% | 3,600.6 | 3,392.2 | 6.1% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 124.2 | 128.8 | 3.7% | 126.5 | 124.9 | 1.3% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 375.9 | 392.0 | 4.3% | 381.9 | 383.1 | -0.3% |
| Index of Leading Indicators (1967=100) | [illegible]8.4 | 191.8 | 7.5% | 184.8 | 173.7 | 6.4% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1967=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 327.9 | 340.1 | 3.7% | 333.2 | 326.0 | 2.2% |
| CPI-U (All Urban Consumers) Food & Beverages | 309.5 | 325.4 | 5.1% | 318.9 | 313.2 | 1.8% |
| CPI-U (All Urban Consumers) Housing | 361.2 | 371.3 | 2.8% | 364.8 | 356.0 | 2.5% |
| CPI-U (All Urban Consumers) Transportation | 308.6 | 316.7 | 2.6% | 310.6 | 316.7 | -1.9% |
| CPI-U (All Urban Consumers) Medical Care | 432.0 | 461.3 | 6.8% | 448.4 | 417.8 | 7.3% |
| CPI-U (All Urban Consumers) Energy | 380.6 | 380.6 | 0.0% | 358.3 | 408.9 | -12.4% |
| Producer Price Index (not seasonally adjusted) (1967=100) | | | | | | |
| Producer Price Index, All Finished Goods | 288.9 | 296.8 | 2.7% | 291.6 | 292.4 | -0.3% |
| GNP Price Deflator (1982=100) (qtly.) | 114.0 | 117.2 | 2.8% | 115.9 | 113.2 | 2.4% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 118.1 | 119.5 | 1.2% | 118.8 | 116.6 | 2.0% |
| Total Civilian Employment (mil.) | 109.7 | 112.2 | 2.3% | 110.9 | 108.3 | 2.4% |
| Unemployment Rate | 7.1 | 6.1 | -14.1% | 6.7 | 7.1 | -6.1% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 21,649.2 | 24,712.0 | 14.1% | 19,883.1 | 18,966.2 | 4.8% |
| Residential | 10,976.9 | 10,986.4 | 0.1% | 9,665.4 | 9,183.7 | 5.2% |
| Nonresidential | 6,760.9 | 8,227.2 | 21.7% | 6,632.2 | 6,442.2 | 3.0% |
| Non-Building | 3,911.4 | 5,498.4 | 40.6% | 3,560.5 | 3,340.4 | 6.6% |
| New Dwelling Units (no.) | 160,846 | 143,985 | -10.5% | 133,265 | 144,321 | -7.7% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 6.21 | 5.69 | -8.4% | 5.54 | 6.82 | -18.8% |
| Long Term (30-year Treasury bond yields) | 8.23 | 8.63 | 4.9% | 7.99 | 9.38 | -14.9% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 8.50 | 8.25 | -2.9% | 7.73 | 9.24 | -16.4% |
| Mortgage Rates (new homes) | 9.74 | 9.05 | -7.1% | -9.29 | 10.34 | -10.2% |

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

F.W. Dodge Report, McGraw-Hill: National Construction Data.

Survey of Current Business, U.S. Department of Commerce: New Home Mortgage Rates.

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Indexes.

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# The Incidence of Bank Failures: The Statistics, Causes, Procedures, and Potential Reforms

Holly S. Southwick*

The United States has experienced a surge in the number of bank failures in recent years, and the problems in the depository institutions industry are not abating.** During the first quarter of 1987, 54 FDIC-insured commercial banks failed or received assistance to prevent failure, the highest number in a single quarter since 1933. By September 14, 1987, 126 banks had failed and 16 others would have failed had they not received assistance from the FDIC. By October 23, 1987, the number of bank failures had risen to 152 nationwide. The depository institutions industry has also suffered in recent years. During the second quarter of 1987, the nation's commercial banks suffered their worst financial quarter since the FDIC began operating in 1934, due principally to writing off billions of dollars in Third World loans.

This article will examine the numbers and characteristics of the recent bank failures; the causes of the failures; the governmental scheme of financial institution regulation; and finally, the reforms that are being debated in political and financial circles.

## Failure Statistics

During the 1920s, banks failed at an average rate of 635 per year.[1] During the four-year period 1930-1933, the period of the three bank crises, banks failed at an average rate of 2,277 per year.[2] Since 1934, however, the rate of bank failures has remained relatively low (Chart 1). Between 1934 and 1942 the annual number of bank failures averaged 54 per year, and between 1943 and 1981 averaged six per year (Table 1). Since 1981, however, bank failures have surged resulting in concern over the stability of the nation's financial system.

Between 1981 and 1983 bank failures averaged 57 per year, and since that period failures have been climbing. During 1984, the number of bank failures rose to 79, and in 1985 rose to 120 (118 insured). Failures in 1986 totaled 144, with an additional 50 thrifts declared insolvent by the Federal Savings and Loan Insurance Corporation (FSLIC). FDIC Chairman L. William Seidman has estimated that the number of bank failures for 1987 will reach 200 failures. During the first quarter of 1987, 54 FDIC-insured commercial banks failed or received assistance to prevent failure.[3] This was the highest number of failures in any

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**The term "bank failure" as used in this article refers generally to the failure of an FDIC-insured financial institution. When thrift failures are discussed they will be referred to specifically by the term "thrift failure."

Table 1
Number and Deposits of Banks Closed
Due to Financial Difficulties, 1934-1986
(deposits, thousands of dollars)

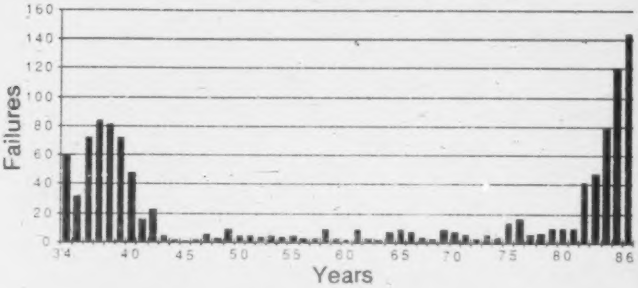
| Year | Total Banks | Total Insured | Total Non-Insured | Total Deposits | Total Insured Deposits | Total Non-Insured Deposits |
|---|---|---|---|---|---|---|
| Total[a] | 1.011 | 875 | 136 | 36.527.425 | 36.383.874 | 143.501 |
| 1934 | 61 | 9 | 52 | 37.333 | 1.968 | 35.365 |
| 1935 | 32 | 26 | 6 | 13,988 | 13.405 | 583 |
| 1936 | 72 | 69 | 3 | 28,100 | 27.508 | 592 |
| 1937 | 84 | 77 | 7 | 34.205 | 33.677 | 528 |
| 1938 | 81 | 74 | 7 | 60,722 | 59;684 | 1,038 |
| 1939 | 72 | 60 | 12 | 160,211 | 157,722 | 2.439 |
| 1940 | 48 | 43 | 5 | 142.788 | 142.430 | 358 |
| 1941 | 17 | 15 | 2 | 29,796 | 29.717 | 79 |
| 1942 | 23 | 20 | 3 | 19,540 | 19,185 | 355 |
| 1943 | 5 | 5 | 0 | 12,525 | 12.525 | 0 |
| 1944 | 2 | 2 | 0 | 1,915 | 1,915 | 0 |
| 1945 | 1 | 1 | 0 | 5,695 | 5,695 | 0 |
| 1946 | 2 | 1 | 1 | 494 | 347 | 147 |
| 1947 | 6 | 5 | 1 | 7,207 | 7,040 | 167 |
| 1948 | 3 | 3 | 0 | 10,674 | 10,674 | 0 |
| 1949 | 9 | 5 | 4 | 9,217 | 6.665 | 2,552 |
| 1950 | 5 | 4 | 1 | 5.555 | 5.513 | 42 |
| 1951 | 5 | 2 | 3 | 6,464 | 3,408 | 3,056 |
| 1952 | 4 | 3 | 1 | 3,313 | 3,170 | 143 |
| 1953 | 5 | 4 | 1 | 45,101 | 44.711 | 390 |
| 1954 | 4 | 2 | 2 | 2,948 | 998 | 1,950 |
| 1955 | 5 | 5 | 0 | 11.953 | 11,953 | 0 |
| 1956 | 3 | 2 | 1 | 11,690 | 11,330 | 360 |
| 1957 | 3 | 2 | 1 | 12,502 | 11,247 | 1,255 |
| 1958 | 9 | 4 | 5 | 10,413 | 8,240 | 2,173 |
| 1959 | 3 | 3 | 0 | 2.593 | 2.593 | 0 |
| 1960 | 2 | 1 | 1 | 7,965 | 6,930 | 1.035 |
| 1961 | 9 | 5 | 4 | 10.611 | 8,936 | 1,675 |
| 1962 | 3 | 1 | 2 | 4,231 | 3,011 | 1,220 |
| 1963 | 2 | 2 | 0 | 23,444 | 23,444 | 0 |
| 1964 | 8 | 7 | 1 | 23.867 | 23.438 | 429 |
| 1965 | 9 | 5 | 4 | 45.256 | 43,861 | 1,395 |
| 1966 | 8 | 7 | 1 | 106,171 | 103.523 | 2.648 |
| 1967 | 4 | 4 | 0 | 10,878 | 10.878 | 0 |
| 1968 | 3 | 3 | 0 | 22,524 | 22,524 | 0 |
| 1969 | 9 | 9 | 0 | 40,134 | 40.134 | 0 |
| 1970 | 8 | 7 | 1 | 55,229 | 54,806 | 423 |
| 1971 | 6 | 6 | 0 | 132.058 | 132.058 | 0 |
| 1972 | 3 | 1 | 2 | 99,784 | 20,480 | 79,304 |
| 1973 | 6 | 6 | 0 | 971,296 | 971,296 | 0 |
| 1974 | 4 | 4 | 0 | 1,575,832 | 1,575,832 | 0 |
| 1975 | 14 | 13 | 1 | 340,574 | 339,574 | 1,000 |
| 1976 | 17 | 16 | 1 | 865,659 | 864,859 | 800 |
| 1977 | 6 | 6 | 0 | 205,208 | 205,208 | 0 |
| 1978 | 7 | 7 | 0 | 854,154 | 854,154 | 0 |
| 1979 | 10 | 10 | 0 | 110,696 | 110,696 | 0 |
| 1980 | 10 | 10 | 0 | 216,300 | 216,300 | 0 |
| 1981 | 10 | 10 | 0 | 3,826,022 | 3,826,022 | 0 |
| 1982 | 42 | 42 | 0 | 9,908,379 | 9,908,379 | 0 |
| 1983 | 48 | 48 | 0 | 5,441,608 | 5,441,608 | 0 |
| 1984 | 79 | 79 | 0 | 2,883,162 | 2,883,162 | 0 |
| 1985[b] | 120 | 120 | 0 | 8,059,441 | 8,059,441 | 0 |
| 1986 | 144 | na | na | na | na | na |

[a] Total does not include 1986.
[b] Includes data for one bank granted financial assistance although no disbursement was required until January 1986.
na - Not available

Source: 1985 Federal Deposit Insurance Corporation Annual Report, p. 61.

Chart 1

Number of Bank Failures, 1934-86



one quarter since 1933. By mid-September, the number rose to 142 failed or assisted FDIC-insured banks[4], and by October 23, 1987, the number of nationwide failures reached 152.[5]

**Dun & Bradstreet Bank Failure Statistics**

Beginning in 1984, Dun & Bradstreet (D&B) began tracking business failures in the finance, insurance, and real estate industry (FIRE), in which banking is included. Table 2 shows the number of failures, liabilities, and the failure rate for banking, the FIRE industry, and all businesses in the United States for the three-year period, 1984-1986. The D&B data shows that the number of bank failures has steadily increased over the three-year period, from 100 in 1984 to 157 in 1986. The failure rate for 10,000 listed concerns shows similar increases, from 50 in 1984 to 81 in 1986. In 1984 banking showed a lower rate of failure than did the FIRE industry of which it is a part, 50 failures per 10,000 listed concerns for banking, compared with 67 failures in the FIRE industry. By 1986, however, the rate of bank failures exceeded that of the industry by 17 failures. An additional concern is the significant increase, 158 percent, in the liabilities of failed banks between 1984-1985. This amount declined (27%) between 1985-86, but still remained high at $5,451.4 million.

**Utah Failures**

**Banks**

Like the rest of the nation, Utah has experienced an upsurge in bank failures in the last several years. Utah had three bank failures in 1986, Utah First Bank ($33.4 million in deposits), Pioneer State Bank ($8.4 million), and Family Bank ($20.0 million). Utah First Bank's deposit liabilities were assumed by Citibank, a newly-chartered state bank subsidiary of Citicorp, New York. Pioneer State Bank was acquired by Zions First National Bank and was

Table 2
Dun & Bradstreet Failure Data
1984-1986P

| | Banking | Finance, Insurance & Real Estate (FIRE) | Total U.S. Business Failures |
|---|---|---|---|
| 1986P | | | |
| Number | 157 | 2,771 | 61,232 |
| Percent Change Previous Year | 0.13 | 0.04 | 0.07 |
| Liabilities (mil. $) | 5,451.4 | 15,750.3 | 44,046.0 |
| Percent Change Previous Year | -0.27 | 0.26 | 0.19 |
| Failure Rate per 10,000 Listed Concerns | 81 | 64 | 120 |
| Percent Change Previous Year | 0.16 | 0.03 | 0.04 |
| 1985 | | | |
| Number | 139 | 2,676 | 57,253 |
| Percent Change Previous Year | 0.39 | 0.12 | 0.10 |
| Liabilities (mil. $) | 7,495.1 | 12,539.6 | 36,937.4 |
| Percent Change Previous Year | 1.58 | 0.47 | 0.26 |
| Failure Rate per 10,000 Listed Concerns | 70 | 62 | 115 |
| Percent Change Previous Year | 0.40 | -0.07 | 0.07 |
| 1984 | | | |
| Number | 100 | 2,392 | 52,078 |
| Liabilities (mil. $) | 2,909.3 | 8,550.0 | 29,268.6 |
| Failure Rate per 10,000 Listed Concerns | 50 | 67 | 107 |

Ppreliminary

Source: Business Failure Record. The Dun & Bradstreet Corporation, 1985, pp. 8-9; 1986, pp. 8-9.

reopened as one of its branches. Family Bank's offices were reopened as branches of Commercial Security Bank. Table 3 shows the nature of the depository institutions industry in Utah between June 30, 1982, and June 30, 1986, while Table 4 shows the disposition of Utah financial institutions between 1982 and 1986.

In 1986, Utah ranked 15th in the nation for the largest amount of deposits associated with failed institutions, and ranked 14th highest in the actual number of institutions (Table 5). There were 24 states that had no bank failures in 1986.*

### Thrifts

The thrift industry in Utah had been quite profitable until about 1982. Federal law limited the amount of interest banks could pay on deposits, but thrifts were not limited. At the same time, interest rates on loans were high, so thrifts could compete for the lowest risk loans and still make a profit. This enviable position did not last however. Inflation and the value of assets securing loans fell, while deregulation eliminated many bank restrictions. Thrifts found themselves having to pay higher rates for deposits, and in turn having to charge higher rates for their loans. This drove away less-risky borrowers, thus resulting in dramatic increases in loan losses.

In January, 1986, the Utah Legislature passed the "Banking Reform Act of 1986," which in part required Utah's 19 industrial loan corporations to obtain federal deposit insurance by July 1, 1989--to that point the thrifts had been privately insured by the Industrial Loan Guarantee Corporation of Utah. This private insurance fund had been established in 1975 to guarantee deposits in Utah industrial loan corporations. Twelve of the 19 institutions (with $43 million in deposits) either received FDIC insurance or were awaiting approval. Seven of the thrifts failed to qualify, and it has been these institutions that have been the source of the thrift controversy over the past year.

In July 1986, Elaine Weis, then Commissioner of Financial Institutions, issued an order suspending the payment of certain thrift deposits and also placed the private insurer in receivership. The aggregate value of the frozen accounts was estimated to be around $109 million. Although these affected thrifts were stranded rather than failed, later audits showed that two of the thrifts were suffering losses.

The seven stranded thrifts include:
Interlake Thrift and Loan ($30.5 million in deposits as of June 30, 1986)
Copper State Thrift and Loan ($24.2 million)
Commerce Financial ($21.6 million)
Western Heritage Thrift and Loan ($14.7 million)
Charter Thrift and Loan ($12.5 million)
St. George Thrift and Loan ($2.7 million)
Horizon Thrift and Loan ($2.4 million)

Interlake, Copper, Commerce, Western, and Charter are being liquidated through a liquidation receivership, while St. George and Horizon are still operating with certain restrictions. St. George is in the process of increasing its capital amounts in order to obtain FDIC insurance, while Horizon was purchased by the Utah State Employees Credit Union (effective September 1, 1987).[6]

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*States without bank failures in 1986 were Arizona, Arkansas, Connecticut, Delaware, Georgia, Hawaii, Maine, Maryland, Massachusetts, Michigan, Mississippi, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, West Virginia.

## Table 3
## Utah Financial Institutions, June 30, 1982-86

| | June 30, 1986 | June 30, 1985 | June 30, 1984 | June 30, 1983 | June 30, 1982 |
|---|---|---|---|---|---|
| Commercial Banks | | | | | |
| State | | | | | |
| Institution | 45 | 49 | 53 | 54 | 55 |
| Assets (thous. $) | $3,469,794 | 3,215,215 | 3,280,003 | 3,043,810 | 2,767,418 |
| National | | | | | |
| Institutions | 7 | 6 | na | na | na |
| Assets (thous. $) | $6,452,990 | 5,911,752 | na | na | na |
| Total Commercial | | | | | |
| Institutions | 52 | 55 | na | na | na |
| Assets (thous. $) | $9,922,784 | 9,126,967 | na | na | na |
| Savings & Loan Assoc. | | | | | |
| State | | | | | |
| Institutions | 10 | 10 | 11 | 11 | 11 |
| Assets (thous. $) | $4,547,770 | 4,043,138 | 4,476,313 | 3,800,935 | 3,680,383[a] |
| Federal | | | | | |
| Institutions | 5 | 5 | na | na | na |
| Assets (thous. $) | $1,145,645[b] | 1,348,675 | na | na | na |
| Total S&Ls | | | | | |
| Institutions | 15 | 15 | na | na | na |
| Assets (thous. $) | $5,693,415 | 5,391,813 | na | na | na |
| Credit Unions | | | | | |
| State | | | | | |
| Institutions | 166 | 179 | 182 | 187 | 195 |
| Assets (thous. $) | $1,721,808 | 1,440,079 | 1,262,034 | 1,148,981 | 973,568 |
| Industrial Loan Corps | | | | | |
| Total | | | | | |
| Institutions | 31 | 37 | 48 | 55 | 56 |
| Assets (thous. $) | $ 732,896 | 817,276 | 758,135 | 637,064 | 605,140c |
| Total | | | | | |
| Institutions | 264 | 286 | 294 | 307 | 317 |
| Assets (thous. $) | $18,070,903 | 16,776,135 | 9,776,485 | 8,630,790 | 8,026,509 |

[a] Only the assets of the Kearns, Utah branch totaling $419,611 are indicated, rather than the total assets of Equitable Savings and Loan Association, Portland, Oregon.

[b] Does not include Deseret Federal Savings & Loan Association.

[c] As of Dec. 31, 1982 rather than June 30, 1982.

na - Not available

Source: Report of the Commissioner of Financial Institutions, Utah Office of Financial Institutions, July 1 to June 30, 1983-1985, p. 10; 1986, p. 2a.

Table 4
Disposition of Utah Financial Institutions, 1982-86

| | State Banks | Savings and Loans | Credit Unions |
|---|---|---|---|
| 1986[a] | | | |
| Closures | 3 | 0 | na |
| Dissolution | na | na | 7 |
| Mergers | 1 | na | 1 |
| Receiver Appointed | na | 1 | na |
| 1985 | | | |
| Closures | 1 | 0 | na |
| Dissolution | na | na | 6 |
| Mergers | 2 | na | 2 |
| Receiver Appointed | na | 0 | na |
| 1984 | | | |
| Closures | 1[b] | 1 | na |
| Dissolution | na | na | 4 |
| Mergers | 2 | na | 0 |
| Receiver Appointed | na | 0 | na |
| 1983 | | | |
| Closures | 0 | 0 | na |
| Dissolution | na | na | 5 |
| Mergers | 1 | na | 2 |
| Receiver Appointed | na | 0 | na |
| Conversion | na | 1 | na |
| 1982 | | | |
| Closures | 0 | 0 | na |
| Dissolution | na | na | 5 |
| Merger | 1 | na | 1 |
| Receiver Appointed | na | 0 | na |

[a] Data for 1986 is only through June 30, 1986.
[b] Golden Spike State Bank closed December 6, 1984, and reopened on December 8, 1984 as NuBank Corporation, dba Golden Spike Bank.
na - Not available

Source: Report of the Commissioner of Financial Institutions, Utah Office of Financial Institutions, July 1 to June 30, 1982-83, pp. 17-18, 44, 81; 1983-84, pp. 17-18, 44, 83; 1984-85, pp. 19, 44, 82; 1985-86, pp. 19, 43, 77.

### Failure Characteristics

Most of the recent bank failures in the U.S. have involved smaller institutions. In 1984, 75 percent of the failures had deposits of $30 million or less, and averaged $41 million in assets.[7] In 1985, the average size of the failed bank declined to $28 million in assets (ignoring two large savings bank failures). The largest commercial bank to fail in 1985 held assets of $214 million, while the smallest held assets of $2.7 million. Of the 120 banks that failed in 1985, 114 of them had assets under $100 million, the size category used to differentiate large institutions from small ones.

The Northeast, Southeast, and Central regions had the fewest troubled financial institutions and are showing continued improvement. Eastern banks have had fewer credit-quality problems and stronger asset growth, while Western banks have shown increases in their proportion of failures. Western banks are expected to fail at a higher rate throughout 1987 than in the past.[8]

Agricultural banks, banks in which agricultural loans account for 25 percent or more of the total loan portfolio, also account for a large number of the failures. Agricultural loans are those (1) that are secured by farm land, (2) that finance agricultural production, and (3) that are used for other purposes by farmers. In 1985, 62 of the 118 (52.5%) FDIC-insured banks were agricultural banks, while in 1986, 59 of the 138 (42.4%) were agricultural.

### List of Problem Banks

The problems in the depository institutions industry do not appear to be subsiding. The FDIC maintains a list of "problem" banks based upon an assessment of their capital, assets, management, earnings, and liquidity (CAMEL rating). This list continues to get longer. In the Spring of 1981, the list had 200 banks on it,[9] in 1983 it registered 369,[10] in March 1985 the list numbered 900,[11] in December 1986 there were 1,484,[12] in March 1987 the number rose to 1,509,[13] and by July 1987, the number hit 1,532.[14] At the end of 1985, approximately 37 percent of the banks on the problem list were agricultural banks.[15]

### Causes of Failures

The causes of the recent increases in bank failures are numerous. Many of the causes are basic and have impacted the health of most banks, failed and non-failed, while other causes have been unique to the failed banks, and had they been controlled or eliminated, could have prevented the bank from failing.

#### Basic Causes with Widespread Impact

Those causes that have impacted most banks, though in varying degrees include:

- General economic conditions
- Deregulation
- The Federal regulatory scheme, including federal deposit insurance coverage
- State regulatory schemes

## Table 5
## State Ranking for FDIC-Insured Bank Failures by Deposits and Number of Failures, 1986

| Rank by Deposits | State | No. | Deposits (millions of dollars) | Rank by Number | State | No. | Deposits (millions of dollars) |
|---|---|---|---|---|---|---|---|
| 1 | Oklahoma | 17 | $2,267.5 | 1 | Texas | 25 | $ 911.8 |
| 2 | Texas | 25 | 911.8 | 2 | Oklahoma | 17 | 2,267.5 |
| 3 | Florida | 3 | 710.3 | 3 | Kansas | 16 | 254.5 |
| 4 | Louisiana | 9 | 638.5 | 4 | Iowa | 10 | 259.3 |
| 5 | California | 8 | 265.3 | 5 | Missouri | 10 | 162.6 |
| 6 | Iowa | 10 | 259.3 | 6 | Louisiana | 9 | 638.5 |
| 7 | Kansas | 16 | 254.5 | 7 | California | 8 | 265.3 |
| 8 | New Mexico | 2 | 169.4 | 8 | Colorado | 7 | 91.0 |
| 9 | Missouri | 10 | 162.6 | 9 | Wyoming | 7 | 104.9 |
| 10 | Nebraska | 6 | 145.7 | 10 | Nebraska | 6 | 145.7 |
| 11 | Tennessee | 4 | 129.3 | 11 | Minnesota | 5 | 107.5 |
| 12 | Minnesota | 5 | 107.5 | 12 | Tennessee | 4 | 129.3 |
| 13 | Wyoming | 7 | 104.9 | 13 | Florida | 3 | 710.3 |
| 14 | Colorado | 7 | 91.0 | **14** | **Utah** | 3 | **61.8** |
| **15** | **Utah** | **3** | **61.8** | 15 | Kentucky | 2 | 16.2 |
| 16 | Idaho | 1 | 54.7 | 16 | New Mexico | 2 | 169.4 |
| 17 | Alaska | 1 | 48.8 | 17 | Alabama | 1 | 15.6 |
| 18 | Montana | 1 | 40.5 | 18 | Alaska | 1 | 48.8 |
| 19 | Wisconsin | 1 | 34.8 | 19 | Idaho | 1 | 54.7 |
| 20 | Puerto Rico | 1 | 28.2 | 20 | Illinois | 1 | 18.8 |
| 21 | Illinois | 1 | 18.8 | 21 | Indiana | 1 | 8. |
| 22 | Kentucky | 2 | 16.2 | 22 | Montana | 1 | 40.5 |
| 23 | Alabama | 1 | 15.6 | 23 | Oregon | 1 | 4.2 |
| 24 | Indiana | 1 | 8. | 24 | Puerto Rico | 1 | 28.2 |
| 25 | So Dakota | 1 | 6.3 | 25 | So Dakota | 1 | 6.3 |
| 26 | Oregon | 1 | 4.2 | 26 | Washington | 1 | na |
|  | Washington | 1 | na | 27 | Wisconsin | 1 | 34.8 |

na - not available

Source: "FDIC-Insured Banks That Have Failed or Been Rescued in 1986," American Banker, January 6, 1987, pp. 14-20.

### General Economic Conditions

The unstable economy of the 1970s and early 1980s has significantly challenged depository institutions. The soaring interest rates and inflation of the late 1960s through early 1980s, as well as recent declines in interest rates and stable inflation, have contributed to the bank failures and losses of recent years. As a result of rising interest rates and spiraling inflation, lending patterns changed and the value of assets securing loans rose. Risk management practices gradually relaxed, and questionable credit risks were obscured by the fast-rising value of assets such as real estate, petroleum, and commodities.[16] As interest rates came down and inflation stabilized, asset values declined, resulting in significant exposure for both borrowers and lenders.

### Deregulation

The early to mid-1980s has also been a time of financial deregulation of the banking and thrift industries. Interest rate ceilings on deposits have been lifted, limitations on entry have been eroding, product lines have been expanded, and the acceptance of interstate banking has been widespread. The effect this deregulation has had on the bank failures is hotly debated by the experts.

Some economists believe that deregulation has substantially contributed to recent bank failures. They argue that the heightened competition and greater freedom given bankers has increased and changed the nature of the industry's risk-taking; riskier loans have been made to pay the competitive rates on deposits, while at the same time disinflation has done frightening things to collateral values. Bankers must now operate on a smaller margin of error and the inability of some to do so has had dire results.

Other economists believe that there is no reason why deregulation should alone cause failures--that it is inept management that turns deregulation into a destructive force.[17] Proponents of deregulation argue that enlarged competition promotes innovation that benefits the industry and the public as a whole. They feel that "[b]ank failures, panicky depositors, and puzzled regulators are part of the price exacted by the growth of new and wider financial markets."[18]

### The Federal Regulatory Scheme

Commentators cite two weaknesses in the federal regulatory scheme that contribute to high bank failures--full insurance coverage of bank deposits and inadequate bank examination and supervision. Currently the FDIC insurance level for each depositor is $100,000. The original purpose of the insurance scheme was to dissuade depositors from starting senseless runs on sound banks. The reality is that depositors no longer monitor their bank's soundness because they know that the appropriate regulatory agency will pay off any losses if their financial institution should fail. The disinterest of the depositor and the negligible cost of the insurance leaves bankers feeling free to take greater risks--sometimes too great. Some argue the bankers have no incentive to control their own risk exposure.

### State Regulatory Scheme

The Federal Home Loan Bank Board (FHLBB), supervisor and director of the system of central banks for savings and loan associations, blames many of the problems in the banking and thrift industries on irresponsible state regulation. The FHLBB claims that many states allow banks and thrifts to engage in risky activities that are prohibited at the federal level, thus contributing to the high rates of bank failure.

### Individual Causes with Individual Bank Impact

Those causes that have had a more direct impact on individual banks or banks within a particular region include:

- Mismanagement, including fraud, embezzlement, insider dealing, poor judgment, and capital structure decisions
- Agricultural, energy, and real estate lending
- Foreign lending, especially Latin American debt
- Diversification
- Hidden causes

### Mismanagement

The mismanagement category includes a variety of activities, including fraud, embezzlement, insider dealing, and poor management decision-making. It seems U.S. financial institutions are being plagued by an unprecedented epidemic of fraud.[19] The FBI reports that bank fraud, including a range of scams and embezzlements, totaled more than $1.1 billion in 1986, up 30 percent from 1985.[20] Some estimate that once regulators and investigators sort out current fraud-related failures, the losses from frauds perpetrated since 1980 could eventually exceed $12 billion.[21] FBI investigators estimate that losses for the entire decade of the 1970s reached only $1.5 billion.[22] L. William Seidman, Chairman of the FDIC, has stated that 40 percent of bank failures involve fraud, embezzlement, or other insider dealing and that this has cost the FDIC $500 million in 1986 alone.[23] The practice of insider dealing, and officers and directors acting as though the bank's money is theirs to allocate as they choose, is the most distressful to regulators.[24]

Poor management decision-making has also had an impact on bank failures. A decision to assume more risk in both capital structure and lending can have adverse consequences. The stability of the depository industry depends on its overall level of capital, relative to assets, for a given level of risk. Capital is needed to survive financial shocks that can hit the institution or industry. Lending decisions pertaining to growth, yield, and borrowers are also critical.

All three of Utah's 1986 bank closures were the result of mismanagement and insider dealing by some of the bank's officers and directors. Family Bank became insolvent as a result of embezzlement totally more than twice the bank's entire capital.[25]

### Agricultural, Real Estate and Energy Lending

Banks around the nation have been severely impacted by the booms and busts in the agricultural, real estate, and energy sectors. Lending became aggressive as inflation kept land and farm product prices rising, and the oil embargo kept energy prices soaring, but now that inflation has been curbed and oil prices have fallen--banks are finding their portfolios full of poor quality loans. This has had dire effects in those states where agriculture, real estate, and energy, or a combination of the three, is an important part of the state's economy.

There were 289 bank failures in the U.S. between 1982 and 1985, but 70 percent (201) of these failures occurred in ten states that have a high concentration of farming and energy business.[26] As Table 5 indicates, those states whose economies depend on agriculture, real estate, or energy have suffered the highest number of, and more severe failures during 1986. In Texas during 1987, a bank has failed on an average of one every six days. In 1983, the average for Texas was one failed bank every 121 days.[27] A further problem is that even if a bank has been cautious and has limited the percentage of loans it has made to a particular sector, it could still suffer when retailers, homeowners, and others suffer from difficulties in the state's basic industries.

### Foreign Lending

Some banks, especially the largest, owe many of their current (and future) problems to foreign loans that will likely go unpaid. The loans were made when deposits were plentiful, interest rates were high, and government officials encouraged loans to lesser-developed countries, especially Latin America.[28] Many banks are now suffering from their past foreign lending practices as they write off as uncollectable billions of dollars in Third World loans.

### Diversification

Banks in states and regions whose economies rely upon recently weakened industries, e.g., farming, energy, or real estate, have especially been suffering. Many experts believe that diversification through interstate banking can solve this problem by enabling a bank to limit its risk exposure and thus decrease its chances of failing. The ability to make out-of-state loans and own banks or thrifts in other states allows a bank to protect itself from specific weaknesses in its own economy. As of March 1987, 42 states and the District of Columbia had interstate banking laws (some on both a regional and a national scale), while 30 states give thrift institutions nationwide or contiguous state permission to acquire or merge with in-state savings and loans.

Out-of-state thrifts from 11 states can acquire Utah savings and loans on a reciprocal basis. These states are Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, New Mexico, Nevada, Oregon, Washington, and Wyoming. The "Banking Reform Act of 1986" opened the State of Utah for full national interstate banking by acquisition of a Utah depository institution after December 31, 1987.

### Hidden Causes

L. William Seidman, Chairman of the FDIC, feels that the real challenges facing the banking system are in the international and off-balance-sheet sphere, rather than the more commonly cited real estate defaults, agricultural losses, energy writedowns, and Third World debt.[29] Seidman is concerned about how the banking system will handle the large and growing volume of riskier transactions that include interest rate swaps, currency swaps, options, and letters of credit.

## Governmental Regulation of Financial Institutions

There are three primary federal agencies responsible for regulating financial institutions: the Comptroller of the Currency, the Federal Reserve, and the Federal Deposit Insurance Corporation. In addition to these, each state has regulatory authority to examine and supervise state chartered financial institutions.

The Office of the Comptroller was created by the National Bank Act of 1864. It is responsible for chartering, examining, and regulating federal banks. The Federal Reserve was established by the Federal Reserve Act of 1913. It controls a centralized pool of funds for the purpose of lending it to member banks as a "last resort," and is primarily responsible for examining state member banks, plus all bank-holding companies and U.S. activities of foreign banking concerns. All federally chartered banks must be members of the Federal Reserve. The Federal Deposit Insurance Corporation was established by the Federal Reserve Act of 1933 to restore public confidence in the banking system, and it is primarily responsible for examining banks covered by its insurance and state non-Federal Reserve member banks.

Each bank is required to submit quarterly financial reports to the appropriate government agency for examination. A bank examiner's primary task is to determine the "net sound capital" of each institution. A bank's capital is represented by those funds available to absorb losses, to compensate for fluctuations in income, or to meet the demands of creditors in the event of insolvency. The bank examiner will closely scrutinize the bank's loan portfolio since loans of poor quality could create losses that could weaken the bank's capital position. Adversely classified loans will be categorized as substandard, doubtful, or loss loans. The net sound capital figure will then be derived by deducting the amount of "loss loans" and 50 percent of "doubtful loans."

The Uniform Interagency Bank Rating System, adopted by all three federal regulators in 1978, rates "capital adequacy" on a scale from 1 to 5. A "1" or "2" rating is favorable. A "3" rating is below peer average and warrants special supervisory concern and perhaps informal administrative action. A "4" or "5" rating indicates the bank is inadequately capitalized and will be subject to formal administrative action.

## Insurance Funds

There are three major depository insurance funds in the nation, the Federal Deposit Insurance Corporation, the Federal Savings and Loan Insurance Corporation, and the National Credit Union Share Insurance Fund. In addition to these, there are various private insurance funds.

### Federal Deposit Insurance Corporation (FDIC)

Federal Deposit Insurance was authorized by the Banking Act of 1933 and the Banking Act of 1935. It was established to restore confidence in the U.S. banking system, to promote safe banking practices, and to safeguard the deposits entrusted to banks. To meet its broad statutory duty, the FDIC was given supervisory as well as regulatory control over the institutions insured.

The FDIC was originally capitalized with $289 million, of which $150 million was contributed by the federal treasury and $139 million by the Federal Reserve. These monies were repaid in 1948, and since then, the fund has been self-sustaining through assessments and income from investments. Between 1933 and 1982, the FDIC protected over six million depositors in 620 insured bank failures, resulting in a recovery of $19.7 billion, or 98.9 percent of insured and uninsured deposits.[30]

As of June 1987, the FDIC insurance fund stood at $18.4 billion.[31] During the first six months of 1987, the fund increased by $1.7 billion. The sources of this increase were insurance premiums, income on investments, proceeds from the sale of failed banks' assets, and other income. The FDIC fund insures $1.5 trillion in deposits held by 14,800 banks.[32] The FDIC recently calculated it had $1.12 reserves for every $100 deposit it insures, but that figure represents the lowest ratio of reserves to potential liabilities in the FDIC's history (Table 6).[33,34]

National and Federal Reserve member state banks receive insured status almost automatically. They become insured upon authorization to commence business or upon becoming members of the Federal Reserve. Non-member state banks must apply directly to the FDIC for insurance. The FDIC will examine the bank to determine whether its assets in excess of capital requirements are adequate to meet all of its liabilities to depositors and other creditors. The FDIC will also consider the bank's

### Table 6
### Federally Insured Deposits and the Federal Deposit Insurance Corporation Fund, 1966-85

| Year Dec. 31 | Insurance Coverage (thous.) | Total Deposits in Banks (mil. $) | Total Insured Deposits (mil. $) | Percent of Insured Deposits to Total | Deposit Insurance Fund (mil. $) | Ratio of Insurance Deposits | Ratio of Insurance Deposits |
|---|---|---|---|---|---|---|---|
| 1985 | 100 | 1,974,512 | 1,503,393 | 76.1 | 17,956.9 | 0.91 | 1.19 |
| 1984 | 100 | 1,806,520 | 1,389,874 | 76.9 | 16,529.4 | 0.91 | 1.19 |
| 1983 | 100 | 1,690,576 | 1,268,332 | 75.0 | 15,429.1 | 0.91 | 1.22 |
| 1982 | 100 | 1,544,697 | 1,134,221 | 73.4 | 13,770.9 | 0.89 | 1.21 |
| 1981 | 100 | 1,409,322 | 988,898 | 70.2 | 12,246.1 | 0.87 | 1.24 |
| 1980 | 100 | 1,324,463 | 948,717 | 71.6 | 11,019.5 | 0.83 | 1.16 |
| 1979 | 40 | 1,226,943 | 808,555 | 65.9 | 9,792.7 | 0.80 | 1.21 |
| 1978 | 40 | 1,145,835 | 760,706 | 66.4 | 8,796.0 | 0.77 | 1.16 |
| 1977 | 40 | 1,050,435 | 692,533 | 65.9 | 7,992.8 | 0.76 | 1.15 |
| 1976 | 40 | 941,923 | 628,263 | 66.7 | 7,268.8 | 0.77 | 1.16 |
| 1975 | 40 | 875,985 | 569,101 | 65.0 | 6,716.0 | 0.77 | 1.18 |
| 1974 | 40 | 833,277 | 520,309 | 62.4 | 6,124.2 | 0.73 | 1.18 |
| 1973 | 20 | 766,509 | 465,600 | 60.7 | 5,615.3 | 0.73 | 1.21 |
| 1972 | 20 | 697,480 | 419,756 | 60.2 | 5,158.7 | 0.74 | 1.23 |
| 1971 | 20 | 610,685 | 374,568 | 61.3 | 4,739.9 | 0.78 | 1.27 |
| 1970 | 20 | 545,198 | 349,581 | 64.1 | 4,379.6 | 0.80 | 1.25 |
| 1969 | 20 | 495,858 | 313,085 | 63.1 | 4,051.1 | 0.82 | 1.29 |
| 1968 | 15 | 491,513 | 296,701 | 60.4 | 3,749.2 | 0.76 | 1.26 |
| 1967 | 15 | 448,709 | 261,149 | 58.2 | 3,485.5 | 0.78 | 1.33 |
| 1966 | 15 | 401,096 | 234,150 | 58.4 | 3,252.0 | 0.81 | 1.39 |

Source: 1985 Federal Deposit Insurance Corporation Annual Report, p. 70.

financial history, its future earnings prospects, the general character of its management, and the convenience and needs of the community served by the bank.

With the passage of the Garn-St. Germain Act in October 1982, Congress expanded the authority of the FDIC by allowing it to provide assistance to all FDIC-insured banks to prevent the closing of such banks. The prior policy had been to provide such assistance only if the continued operation of the bank was essential to provide adequate banking service in the community.

**Federal Savings & Loan Insurance Corporation (FSLIC)**

The FSLIC is a government insurance agency that was created by the National Housing Act of 1934. The FHLBB, an independent federal regulatory agency established by the Federal Home Loan Bank Act of 1932, oversees the operations of the FSLIC. Through the FSLIC, each insured saver's account is guaranteed up to a maximum of $100,000 per account.

The FSLIC fund has been a source of concern and controversy recently. The fund is capitalized by assessments from thrift institutions, but has been operating in the red. The General Accounting Office, an auditing arm of the U.S. Congress, has indicated that a recent review shows that the fund is operating at a $3 billion deficit.[35]

On August 10, 1987, President Reagan signed into law the Competitive Equality Banking Act of 1987. The legislation provides $10.8 billion for recapitalization of the FSLIC, requires regulators to give troubled thrifts more time to work out financial problems, closes the nonbank-bank loophole, and sets a moratorium on new powers for commercial banks. Additional reforms in the financial services industry are expected in the next legislative session.

### National Credit Union Administration (NCUA)

Credit unions came to the United States in 1909 from Germany, and in 1934 Congress created the Federal credit union system. The National Credit Union Administration, with its National Credit Union Share Insurance Fund, was created during the 1970s. The financially healthy National Credit Union Share Insurance Fund guarantees depositors for up to $100,000 at 15,163 federal and state-chartered credit unions (Table 7).

Table 7
Natural Person Federal Credit Unions
Experiencing Losses, 1981-86

| Year Ending Dec 31 | No. of Federal Credit Unions | Number Experiencing Losses | Percentage of Total | Amount of Loss (thous. $) |
|---|---|---|---|---|
| 1986 | 9,758 | 1,360 | 13.9 | $43,805 |
| 1985 | 10,125 | 1,178 | 11.6 | 31,604 |
| 1984 | 10,547 | 1,041 | 9.9 | 18,555 |
| 1983 | 10,963 | 2,443 | 22.3 | 45,434 |
| 1982 | 11,631 | 2,572 | 22.1 | 63,098 |
| 1981 | 11,969 | 2,561 | 21.4 | 82,735 |

Source: 1986 National Credit Union Administration Annual Report, p. 36.

### FDIC Failure Procedure *

When an FDIC-insured bank fails or when the FDIC is appointed receiver of a bank closed by a national or state banking authority, the FDIC has the responsibility of determining what is the best action to take to protect the banking system, depositors, and the FDIC Deposit Insurance Fund.** The FDIC has essentially four options:

1) Direct financial assistance to the troubled bank to prevent closing or to restore a closed bank to normal operations;

2) A deposit payoff, i.e. pay off deposits and close the institution (uninsured depositors share in the loss);

3) A purchase and assumption transaction (P&A), i.e., enter into a merger--the sick bank into a healthy partner (no depositor loses anything); and

4) Organization of a new national bank to temporarily assume the insured deposits of the closed bank.

The FDIC has rarely infused capital into a troubled bank, option one, or organized a new national bank, option four. P&A transactions have been the FDIC's favored choice (Tables 8 and 9). The FDIC estimated $59 million was saved in 1984 by utilizing the P&A procedure.[36]

In a P&A transaction, the acquiring bank assumes all of the failed bank's deposit liabilities and purchases some of its assets. The cash payment from the FDIC equals the liabilities of the failed bank, less the value of the assets of the failed bank purchased by the bank with the winning bid, less the purchase premium bid by the bank.

The P&A transaction is considered preferable to a deposit payoff because:

1) The depositors and creditors of the failed bank are protected up to the full amount of their deposits and claims against the bank.

2) The FDIC, as insurer, does not have to pay off the numerous account holders.

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*Procedures for the FSLIC and the NCUA are similar to the FDIC procedure, with minor differences. Only the FDIC procedure will be discussed in this article.

**A commercial bank is officially declared a failed bank by its chartering agency, the Comptroller of the Currency for a national bank and the state banking authority for a state-chartered bank.

3) The failed bank is reopened immediately or never closed, thus preventing panic and inconvenience to depositors.

4) The FDIC is in a better position to recover its costs when it is a "purchaser" of assets rather than a subrogee of the rights of the depositors.

5) The FDIC, as receiver, obtains the going concern value of the bank, which is higher than the bank's liquidation value.

Table 8
FSLIC Case Activity, 1965

| Action | No. of Cases | Assets |
|---|---|---|
| Assisted Acquisition and Rehabilitation | 23 | $ 4.3 billion |
| Mergers | 14 | |
| Acquisition by holding company | 3 | |
| Acquisition by investor group | 5 | |
| Rehabilitation | 1 | |
| Management Consignment Program | 23 | $15.7 billion |
| Liquidation | 10 | |
| Cash-backed transfer of accounts | 6 | |
| Asset-backed transfer of accounts | 2 | |
| Cash payout to depositors | 2 | $ 2.2 billion |
| Total | 56 | $22.2 billion |

Source: 1985 Federal Home Loan Bank Board Annual Report, p. 27.

Although the FDIC favors a purchase and assumption resolution, this route cannot be taken unless it is less costly than the deposit payoff liquidation (least cost test), or the bank is essential to provide adequate banking services to the community.

It is clear that the P&A transaction is more advantageous than the other methods of failure resolution, but the technique is criticized because the public's perception of the banking insurance system has been altered. The P&A essentially ignores the statutory insurance limit of $100,000 and provides 100 percent coverage for all deposits. This result eliminates the incentive of large depositors to monitor the activities and health of their financial institutions. Another weakness is that the use of the P&A increases with the size of the bank, thus large depositors in large banks receive more protection that large depositors in small banks.

Table 9
Disposition of FDIC Cases Requiring Disbursements,
1934 - 1985

| Year | Number of Banks | Deposit Payoff Cases | Percent of Total | Deposit Assumption Cases | Percent of Total |
|---|---|---|---|---|---|
| Total | 867 | 373 | 43.0 | 494 | 57.0 |
| 1985 | 120 | 29 | 24.2 | 91 | 75.8 |
| 1984 | 79 | 16 | 20.3 | 63 | 79.7 |
| 1983 | 48 | 9 | 18.8 | 39 | 81.3 |
| 1982 | 42 | 7 | 16.7 | 35 | 83.3 |
| 1981 | 10 | 2 | 20.0 | 8 | 80.0 |
| 1980 | 10 | 3 | 30.0 | 7 | 70.0 |
| 1979 | 10 | 3 | 30.0 | 7 | 70.0 |
| 1978 | 7 | 1 | 14.3 | 6 | 85.7 |
| 1977 | 6 | 0 | 0.0 | 6 | 100.0 |
| 1976 | 16 | 3 | 18.8 | 13 | 81.3 |
| 1975 | 13 | 3 | 23.1 | 10 | 76.9 |
| 1974 | 4 | 0 | 0.0 | 4 | 100.0 |
| 1973 | 6 | 3 | 50.0 | 3 | 50.0 |
| 1972 | 1 | 1 | 100.0 | 0 | 0.0 |
| 1971 | 6 | 5 | 83.3 | 1 | 16.7 |
| 1970 | 7 | 4 | 57.1 | 3 | 42.9 |
| 1969 | 9 | 4 | 44.4 | 5 | 55.5 |
| 1968 | 3 | 0 | 0.0 | 3 | 100.0 |
| 1967 | 4 | 4 | 100.0 | 0 | 0.0 |
| 1966 | 7 | 1 | 14.3 | 6 | 85.7 |
| 1961-1965[a] | 19 | 17 | 89.5 | 2 | 10.5 |
| 1956-1960 | 11 | 9 | 81.8 | 2 | 18.2 |
| 1951-1955 | 14 | 4 | 28.6 | 10 | 71.4 |
| 1946-1950 | 17 | 0 | 0.0 | 17 | 100.0 |
| 1940-1945 | 43 | 19 | 44.2 | 24 | 55.8 |
| 1936-1940 | 321 | 193 | 60.1 | 128 | 39.9 |
| 1935 | 25 | 24 | 96.0 | 1 | 0.00 |
| 1934 | 9 | 9 | 1.00 | 0 | 0.00 |

[a] No case in 1962 required disbursements.

Source: 1985 Federal Deposit Insurance Corporation Annual Report, p. 68.

Before 1982, all large banks (deposits in excess of $100 million) that were closed because of financial difficulty were settled with a P&A transaction. With the 1982 deposit payoff settlement of the PennSquare Bank of Oklahoma City ($470 million), the FDIC's settlement policy became a little uncertain. There are four factors that contribute to the FDIC's bias in favor of merger settlements for large banks:

1) The premium price paid to acquire the failed bank's charter is ordinarily large enough to make the merger cheaper than a deposit payoff.

2) Larger banks have a greater proportion of their liabilities in uninsured deposits.

3) Deposit payoffs are more difficult with large banks because of the large immediate cash outlay required of the FDIC.

4) The FDIC's concern over the impact on healthy banks from the closure of an unhealthy one, especially a large one.[37]

In December 1983, the FDIC announced a new procedure to dispose of bank assets and deposit liabilities. This procedure, the "modified payout," was adopted to give the FDIC greater flexibility in minimizing the disruption in banking services, while at the same time exposing uninsured depositors to some risk of loss on their deposits. The first bank failure to be handled by the new procedure occurred in March 1984.

## Rotential Reforms

The increase in the number of financial institution failures across the nation has sparked debate over various reforms that could help prevent future failures and strengthen the overall banking system. Considerations that must be kept in mind when weighing proposals for reform are: (1) protecting the stability of the money supply by preventing runs on banks; (2) keeping the government's responsibility commensurate to its risk liability; and (3) promoting maximum efficiency in the financial system. There are a variety of proposed reforms: (1) establish risk-related insurance premiums, (2) change capital requirements, (3) modify payouts to uninsured depositors, (4) allow interstate banking, (5) improve public disclosure, (6) increase penalties for officers and directors, (7) increase the risk of junior creditors, (8) change auditing requirements, (9) improve bank examination, (10) merge the regulatory agencies, and (11) curb state banking powers.

### Establish Risk-Related Insurance Premiums

Establishing a bank's deposit insurance premiums on the riskiness of its operations has long been a serious reform proposal. Federal deposit insurance was intended to protect small, unsophisticated investors, not those in a position to protect themselves or who wish to have their speculative activities financed by a government agency.

Proponents of the risk-related insurance premium argue that a constant insurance assessment (1/12th of 1% of total deposit liabilities annually) fails to penalize banks that pose a higher risk to the insurance fund. They feel that fixed premiums actually encourage banks to incur more risk because the insurer bears the loss, while the bank reaps the potential benefits.

Opponents of this reform argue that calculating risk-related premiums would be too difficult, and that doing so would undermine public confidence in the banking system. They feel such a policy would destabilize the banking system by forcing the private sector to speculate on the health of banks, thus creating the risk of foolish runs on healthy institutions.

The FDIC favors a risk-related premium system, but does not believe that risk can be measured accurately enough to set insurance premiums. The FDIC feels however that fairness dictates that some moderate differential in premiums should exist to penalize banks that refuse to conform their policies to acceptable banking behavior.

### Change Capital Requirements

All other things equal, a depository industry funded with more capital relative to assets will experience fewer failures, will be more stable, and will be less likely to threaten the depository insurance funds than one with less capital. In addition, the only private individuals who can be relied upon to seriously monitor a bank's safety are those with an economic stake in its financial condition, its owners. Bank owners can be forced to assume more risk in three ways: (1) increase equity capital adequacy requirements, (2) impose double liability on shareholders, or (3) force problem banks to close before they exhaust their economic net worth.

Some experts argue that mandating increases in equity capital can hamper a bank's ability to compete, and that pressuring owners to bear a higher risk of loss can backfire and result in owners pressuring management to take more risks for profitability.[38] In addition, they claim that significantly changing capital requirements could make issuing new stock difficult.

### Modify Payouts to Uninsured Depositors

Modifying the payouts to uninsured depositors in failed institutions is an additional reform that could be utilized to bring more discipline to the depository industry. Banking history has shown that uninsured depositors enjoy the same federal protection as insured depositors. The FDIC's practice of utilizing the P&A transaction has eliminated any incentive large depositors might otherwise have to ensure the safety of their banks. Others argue, however, that big depositors may not be sophisticated enough to impose market discipline in an orderly manner, and that making any depositor vulnerable raises the risk of a bank panic.

### Allow Interstate Banking

Diversification through interstate banking is yet another reform that experts propose as a way to reinforce bank safety and soundness. As was discussed above, the ability to make out-of-state loans and own banks or thrifts in other states allows a bank to protect itself from specific weaknesses in its own state or regional economy. As of March 1987, 42 states and the District of Columbia have interstate banking laws (some on both a regional and national scale), while 30 states give thrift institutions nationwide or contiguous state permission to acquire or merge with in-state savings and loans.

### Improve Public Disclosure

The FDIC believes that increasing the amount of public disclosure of bank information could enhance the ability of the market to control bank behavior. The FDIC has developed a policy statement setting forth minimum standards for bank disclosure. The policy also encourages uninsured depositors to request additional information when banks do not comply with the disclosure standard. The FDIC is also considering publishing in the Federal Register statutory enforcement actions against banks.

### Increase Penalties for Officers and Directors

Increasing the penalties for officers and directors of failed institutions offers an additional source of discipline. Federal regulators must continue to make directors realize their full potential in the regulatory process. Recently the government has begun assigning multi-million dollar fines on bankers whose negligent or criminal conduct causes costly failures.

### Increase the Risk of Junior Creditors

Subordinated bank creditors provide the FDIC a protective cushion in the case of failure. By increasing capital adequacy requirements and requiring that a portion of the capital be subordinated debt, an incentive to monitor banking practices is created. Subordinated creditors generally have both the ability and incentive to monitor a bank's risk-taking behavior.

### Change Auditing Requirements

The FDIC is considering requiring community banks to subject their financial statements to external audits because of the growing role of internal fraud in banks. In addition, more work in the area of bank failure prediction could provide warning signals to regulators to stop risky activities before it is too late to save the institution from failure.

### Improve Bank Examination

Improving the government's corp of bank examiners is another way to make the banking system more sound. This includes (1) increasing the number of examiners, (2) making compensation competitive with the private sector to prevent the adverse effects of high employment turnover, and (3) making examination procedures more sophisticated.

### Merge the Regulatory Agencies

William M. Isaac, former Chairman of the FDIC, feels that merging the FDIC and the FSLIC might provide more stability to the financial system.[39] Some feel this alternative would be a crutch rather than a solution to current regulatory problems.

### Curb State Banking Powers

Some experts feel that state banking powers should be curbed, thus reining in the wide ranging activities of state-chartered financial institutions.

## Conclusion

Bank failure statistics indicate that the challenges in the financial institutions industry are not yet over. Banks continue to fail at rates higher than were experienced during the Great Depression. The causes of the failures are more evident than the courses of action that should be taken to ensure continued stability of the nation's financial system. Strong debate rages over the reforms that should be

**adopted. Steps were taken to strengthen the FSLIC and change various regulatory procedures in the Competitive Equality Banking Act of 1987, but additional reforms are needed.**

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# Utah Business Statistics

| UTAH DATA | July 1986 | July 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| **Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.)** | 18,340$^r$ | NA | NA | NA | 18,047 | NA |
| **New Corporations (no.)** | 574 | 447 | -22.1% | 442 | 475 | -6.9% |
| **New Car, Truck and Motorhome Sales (no.)** | 6,369 | NA | NA | NA | 6,265 | NA |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 55.50 | 63.50 | 14.4% | 60.70 | 54.07 | 12.3% |
| Lambs (cwt) | 66.20 | 74.80 | 13.0% | 70.82 | 64.88 | 9.1% |
| Milk Wholesale (cwt) | 11.10 | 11.40 | 2.7% | 12.03 | 11.63 | 3.4% |
| Alfalfa Hay, Baled (per ton) | 66.00 | 71.00 | 7.6% | 64.67 | 70.14 | -7.8% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 40,053 | 45,148 | 12.7% | 39,686 | 35,834 | 10.7% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 127,666 | 166,466 | 30.4% | 127,145 | 136,269 | -6.7% |
| Residential | 72,996 | 62,008 | -15.1% | 57,395 | 59,066 | -2.8% |
| Nonresidential | 41,231 | 45,825 | 11.1% | 39,027 | 50,258 | -22.3% |
| Public Works and Utilities | 13,439 | 58,633 | 336.3% | 30,723 | 27,188 | 13.0% |
| Total Permit Construction (thous. of dol.) [2] | 124,445.1 | 96,045.6 | -22.8% | 98,824.1 | 121,750.6 | -18.8% |
| Residential | 73,320.0 | 48,270.7 | -34.2% | 50,473.0 | 63,797.0 | -20.9% |
| Nonresidential | 36,882.8 | 31,761.0 | -13.9% | 34,895.5 | 43,804.7 | -20.3% |
| Additions, Alterations and Repairs | 14,242.3 | 16,013.9 | 12.4% | 13,452.6 | 13,672.4 | -1.6% |
| New Dwelling Units (no.) | 1,437 | 663 | -53.9% | 793 | 1,306 | -39.3% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 755.9$^r$ | 754.6 | -0.2% | 761.9 | 753.1 | 1.2% |
| Total Employed Persons | 711.2$^r$ | 707.2 | -0.6% | 712.9 | 710.3 | 0.4% |
| Unemployed Persons | 44.6$^r$ | 47.4 | 6.3% | 48.9 | 42.4 | 15.5% |
| Percent Total Labor Force | 5.9$^r$ | 6.3 | 6.8% | 6.4 | 5.6 | 14.7% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 629.9$^r$ | 637.9 | 1.3% | 638.8 | 632.9 | 0.9% |
| Manufacturing | 92.7$^r$ | 94.1 | 1.5% | 91.5 | 93.8 | -2.4% |
| Mining | 6.9$^r$ | 7.9 | 14.5% | 8.1 | 8.6 | -6.1% |
| Contract Construction | 34.9$^r$ | 29.8 | -14.6% | 30.3 | 35.1 | -13.6% |
| Transportaion, Communication and Utilities | 37.6$^r$ | 37.9 | 0.8% | 37.5 | 37.0 | 1.4% |
| Wholesale Trade | 36.5$^r$ | 36.7 | 0.5% | 36.3 | 35.8 | 1.2% |
| Retail Trade | 117.1$^r$ | 119.6 | 2.1% | 118.8 | 115.1 | 3.2% |
| Finance, Insurance and Real Estate | 33.1$^r$ | 34.2 | 3.3% | 33.6 | 32.2 | 4.3% |
| Services [3] | 137.6$^r$ | 144.6 | 5.1% | 140.9 | 135.3 | 4.1% |
| Federal Government | 40.8$^r$ | 39.7 | -2.7% | 40.3 | 40.1 | 0.4% |
| State Government [4] | 36.1$^r$ | 34.9 | -3.3% | 37.4 | 37.1 | 1.0% |
| Local Government [4] | 56.6$^r$ | 58.5 | 3.4% | 64.1 | 62.8 | 2.2% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 39.9$^r$ | 40.3 | 1.0% | 39.7 | 40.4 | -1.8% |
| Mining | 40.1$^r$ | 41.2 | 2.7% | 42.1 | 44.1 | -4.6% |
| Wholesale Trade | 36.9$^r$ | 39.3 | 6.5% | 38.0 | 35.8 | 6.2% |
| Retail Trade | 28.9$^r$ | 29.0 | 0.3% | 28.3 | 28.1 | 0.8% |
| Amount of Unemployment Compensation (thous. of dol.) | 7,251.0 | 6,282.3 | -13.4% | 8,812.4 | 7,763.0 | 13.5% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,383.8 | 2,470.4 | 3.6% | 2,432.9 | 2,346.4 | 3.7% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 43,871.7 | 56,443.4 | 28.7% | 130,578.7 | 125,562.9 | 4.0% |
| Sales and Use Tax | 8,419.8 | 13,085.4 | 55.4% | 46,931.6 | 45,444.1 | 3.3% |
| Motor Fuel Tax | 6,588.5 | 2,417.3 | -63.3% | 7,984.2 | 7,763.6 | 2.8% |
| Individual Income Tax | 15,859.1 | 24,384.0 | 53.8% | 45,131.5 | 37,599.0 | 20.0% |
| Corporation Franchise Tax | 2,473.6 | 4,556.2 | 84.2% | 5,247.5 | 5,594.1 | -6.2% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,037.8 | NA | NA | NA | 1,106.4 | NA |
| Crude Oil to Refineries (thous. of bbls.) | 4,040.8 | 4,065.0 | 0.6% | 3,920.3 | 3,697.0 | 6.0% |
| Crude Oil (thous. of bbls.) | 3,237.1 | 3,023.9 | -6.6% | 3,027.5 | 3,441.8 | -12.0% |
| Natural Gas (mil. of cu. ft.) | 18,333.2 | 21,718.1 | 18.5% | 20,458.1 | 18,821.3 | 8.7% |
| Coal (thous. short tons) | 896.0 | 1,250.0 | 39.5% | 954.1 | 1,083.4 | -11.9% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 921,754 | 1,010,460 | 9.6% | 840,812 | 793,569 | 6.0% |
| Highway Traffic Count Across State Lines | 51,949 | 51,815 | -0.3% | 38,134 | 35,022 | 8.9% |
| Transient Room Taxes (thous. of dol.) | 86.2 | 559.5 | 549.1% | 476.6 | 467.7 | 1.9% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 2,284.9 | 2,242.0 | -1.9% | 1,027.5 | 981.4 | 4.7% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 468,847 | 477,566 | 1.9% | 476,966 | 468,043 | 1.9% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 168,119 | 175,914 | 4.6% | 172,864 | 166,701 | 3.7% |
| Electric Customers (Residential) | 459,799 | 469,772 | 2.2% | 468,172 | NA | NA |
| Electric Customers (Commercial) | 45,420 | 46,201 | 1.7% | 45,977 | NA | NA |
| Natural Gas Customers (Residential & Commercial) | 430,625 | 442,329 | 2.7% | 442,368 | 430,222 | 2.8% |
| Natural Gas Customers (Industrial) | 566 | 557 | -1.6% | 562 | 568 | -1.1% |

# Utah Business Statistics

| UTAH DATA | July 1986 | July 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| **Davis County** | | | | | | |
| Non-Ag. Employment (thous.) | 54.0$^{r}$ | 54.4$^{fo}$ | 0.7% | 53.3 | 53.2 | 0.1% |
| Unemployment Rate | 4.6$^{r}$ | 5.5 | 19.6% | 5.2 | 4.0 | 30.0% |
| Auth. Permit Construction (thous. of dol.) | 19,112.4 | 9,364.5 | -51.0% | 14,291.8 | 16,698.0 | -14.4% |
| New Dwelling Units (no.) | 219 | 87 | -60.3% | 130 | 241 | -46.2% |
| Postal Receipts (thous. of dol.) | 312.7 | 310.7 | -0.6% | NA | 322.7 | NA |
| Electric Customers (Residential) | 45,138 | 47,374 | 5.0% | 46,551 | 39,918 | 16.6% |
| Electric Customers (Commercial) | 3,365 | 3,285 | -2.4% | 3,258 | 2,952 | 10.4% |
| Natural Gas Customers (Residential) | 45,827 | 48,585 | 6.0% | 47,966 | 45,364 | 5.7% |
| Natural Gas Customers (Industrial) | 51 | 52 | 2.0% | 52 | 51 | 2.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 53,139 | 55,189 | 3.9% | 54,326 | 51,489 | 5.5% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,148 | 10,663 | 5.1% | 10,364 | 9,895 | 4.7% |
| **Salt Lake County** | | | | | | |
| Non-Ag. Employment (thous.) | 328.5$^{r}$ | 335.1$^{fo}$ | 2.0% | 334.0 | 328.5 | 1.7% |
| Unemployment Rate | 5.2$^{r}$ | 5.4 | 3.8% | 5.5 | 5.6 | -1.7% |
| Auth. Permit Construction (thous. of dol.) | 55,538.7 | 44,939.8 | -19.1% | 47,952.2 | 62,061.9 | -22.7% |
| New Dwelling Units (no.) | 772 | 216 | -72.0% | 328 | 587 | -44.1% |
| Postal Receipts (thous. of dol.) | 6,299.0 | 6,222.3 | -1.2% | 7,049.7 | 7,404.7 | -4.8% |
| Electric Customers (Residential) | 229,864 | 235,524 | 2.5% | 234,536 | 228,364 | 2.7% |
| Electric Customers (Commercial) | 19,337 | 19,981 | 3.3% | 19,695 | 18,996 | 3.7% |
| Natural Gas Customers (Residential) | 210,564 | 215,558 | 2.4% | 215,829 | 209,707 | 2.9% |
| Natural Gas Customers (Industrial) | 260 | 240 | -7.7% | 248 | 259 | -4.2% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 222,095 | 226,175 | 1.8% | 225,283 | 220,342 | 2.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 107,750 | 110,001 | 2.1% | 109,137 | 107,151 | 1.9% |
| **Utah County** | | | | | | |
| Non-Ag. Employment (thous.) | 70.4$^{r}$ | 70.5$^{fo}$ | 0.1% | 72.0 | 71.7 | 0.4% |
| Unemployment Rate | 5.3$^{r}$ | 6.7 | 26.4% | 7.5 | 6.0 | 24.1% |
| Auth. Permit Construction (thous. of dol.) | 12,035.2 | 15,164.1 | 26.0% | 11,446.6 | 10,782.5 | 6.2% |
| New Dwelling Units (no.) | 182 | 113 | -37.9% | 96 | 106 | -9.0% |
| Postal Receipts (thous. of dol.) | 794.3 | 798.3 | 0.5% | 928.1 | 916.8 | 1.2% |
| Electric Customers (Residential) | 49,148 | 50,451 | 2.7% | 50,356 | NA | NA |
| Electric Customers (Commercial) | 6,221 | 6,275 | 0.9% | 6,334 | NA | NA |
| Natural Gas Customers (Residential) | 58,817 | 59,342 | 0.9% | 60,040 | 59,155 | 1.5% |
| Natural Gas Customers (Industrial) | 73 | 68 | -6.8% | 72 | 71 | 1.3% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 60,093 | 61,027 | 1.6% | 62,378 | 61,726 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 15,881 | 18,534 | 16.7% | 17,508 | 15,456 | 13.3% |
| **Weber County** | | | | | | |
| Non-Ag. Employment (thous.) | 60.3$^{r}$ | 60.9$^{fo}$ | 1.0% | 60.3 | 58.7 | 2.6% |
| Unemployment Rate | 7.2$^{r}$ | 7.8 | 8.3% | 7.0 | 5.7 | 22.8% |
| Auth. Permit Construction (thous. of dol.) | 9,544.6 | 8,451.8 | -11.4% | 9,228.4 | 8,457.5 | 9.1% |
| New Dwelling Units (no.) | 82 | 106 | 29.3% | 75 | 98 | -23.7% |
| Postal Receipts (thous. of dol.) | 559.5 | 530.9 | -5.1% | 622.6 | 606.5 | 2.7% |
| Electric Customers (Residential) | 51,788 | 52,736 | 1.8% | 52,471 | 51,305 | 2.3% |
| Electric Customers (Commercial) | 4,737 | 4,822 | 1.8% | 4,795 | 4,702 | 2.0% |
| Natural Gas Customers (Residential) | 47,542 | 48,564 | 2.1% | 48,725 | 47,556 | 2.5% |
| Natural Gas Customers (Industrial) | 87 | 86 | -1.1% | 85 | 87 | -1.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,280 | 45,987 | 1.6% | 45,734 | 45,246 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,564 | 11,026 | 4.4% | 10,751 | 10,530 | 2.1% |

$^{r}$ Revised  $^{na}$ Not available  $^{fo}$ Forecast

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U. S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics
[2] Obtained from Utah Construction Report
[3] Includes services by nonprofit and religious institutions
[4] Includes public schools and college institutions

# Utah Business Statistics

| UTAH DATA | August 1986 | August 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,340$^r$ | NA | NA | NA | 18,106.5 | NA |
| New Corporations (no.) | 347 | 433 | 24.8% | 450 | 465 | -3.3% |
| New Car, Truck and Motorhome Sales (no.) | 6,807 | NA | NA | NA | 6,204 | NA |
| Agriculture ---------- | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 57.20 | 64.10 | 12.1% | 61.28 | 54.68 | 12.1% |
| Lambs (cwt) | 66.00 | 72.30 | 9.5% | 71.34 | 64.81 | 10.1% |
| Milk Wholesale (cwt) | 11.40 | 11.70 | 2.6% | 12.06 | 11.65 | 3.5% |
| Alfalfa Hay, Baled (per ton) | 64.00 | 66.00 | 3.1% | 64.83 | 70.48 | -8.0% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 37,276 | 44,303 | 18.9% | 40,271 | 35,912 | 12.1% |
| Construction ---------- | | | | | | |
| Total Construction (thous. of dol.)[1] | 125,329 | 92,252 | -26.4% | 124,388 | 129,655 | -4.1% |
| Residential | 63,013 | 55,997 | -11.1% | 56,810 | 58,517 | -2.9% |
| Nonresidential | 44,730 | 27,605 | -38.3% | 37,600 | 48,302 | -22.2% |
| Public Works and Utilities | 17,586 | 8,650 | -50.8% | 29,978 | 23,078 | 29.9% |
| Total Permit Construction (thous. of dol.)[2] | 129,584.5 | 100,335.2 | -22.6% | 96,386.7 | 121,374.3 | -20.6% |
| Residential | 74,404.0 | 45,583.1 | -38.7% | 48,071.2 | 64,029.4 | -24.9% |
| Nonresidential | 30,496.9 | 28,906.1 | -5.2% | 34,763.0 | 42,855.5 | -18.9% |
| Additions, Alterations and Repairs | 24,647.6 | 25,846.0 | 4.9% | 13,552.5 | 14,510.0 | -5.6% |
| New Dwelling Units (no.) | 1,150 | 656 | -43.0% | 752 | 1,274 | -41.0% |
| Employment ---------- | | | | | | |
| Civilian Labor Force (thous.) | 758.7$^r$ | 755.6 | -0.4% | 761.6 | 753.2 | 1.1% |
| Total Employed Persons | 715.5$^r$ | 709.6 | -0.8% | 712.4 | 710.1 | 0.3% |
| Unemployed Persons | 43.2$^r$ | 46.0 | 6.5% | 49.2 | 42.7 | 15.1% |
| Percent Total Labor Force | 5.7$^r$ | 6.1 | 7.0% | 6.5 | 5.7 | 14.5% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 631.4$^r$ | 639.9 | 1.3% | 639.5 | 633.5 | 0.9% |
| Manufacturing | 91.7$^r$ | 94.4 | 2.9% | 91.7 | 93.3 | -1.7% |
| Mining | 6.9$^r$ | 7.9 | 14.5% | 8.2 | 8.4 | -3.1% |
| Contract Construction | 35.1$^r$ | 29.6 | -15.7% | 29.9 | 34.7 | -13.9% |
| Transportaion, Communication and Utilities | 37.7$^r$ | 37.9 | 0.5% | 37.6 | 37.1 | 1.3% |
| Wholesale Trade | 36.4$^r$ | 36.7 | 0.8% | 36.3 | 35.9 | 1.3% |
| Retail Trade | 118.2$^r$ | 120.6 | 2.0% | 119.0 | 115.5 | 3.0% |
| Finance, Insurance and Real Estate | 33.4$^r$ | 34.1 | 2.1% | 33.6 | 32.3 | 3.9% |
| Services[3] | 138.1$^r$ | 145.4 | 5.3% | 141.5 | 136.0 | 4.1% |
| Federal Government | 40.9$^r$ | 39.7 | -2.9% | 40.2 | 40.2 | -0.2% |
| State Government[4] | 35.9$^r$ | 35.2 | -1.9% | 37.4 | 37.3 | 0.2% |
| Local Government[4] | 57.0$^r$ | 58.3 | 2.3% | 64.2 | 62.7 | 2.4% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 40.4$^r$ | 40.7 | 0.7% | 39.7 | 40.4 | -1.7% |
| Mining | 39.0$^r$ | 40.9 | 4.9% | 42.2 | 43.6 | -3.1% |
| Wholesale Trade | 37.9$^r$ | 39.3 | 3.7% | 38.1 | 35.9 | 6.0% |
| Retail Trade | 28.9$^r$ | 29.5 | 2.1% | 28.3 | 28.0 | 1.0% |
| Amount of Unemployment Compensation (thous. of dol.) | 6,267.3 | 5,654.1 | -9.8% | 8,761.3 | 7,819.7 | 12.0% |
| Finance ---------- | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,395.1 | 2,453.0 | 2.4% | 2,437.7 | 2,347.4 | 3.8% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 179,146.8 | 200,943.8 | 12.2% | 132,395.1 | 124,907.3 | 6.0% |
| Sales and Use Tax | 69,238.8 | 71,894.1 | 3.8% | 47,152.9 | 45,245.8 | 4.2% |
| Motor Fuel Tax | 7,930.5 | 9,056.5 | 14.2% | 8,078.0 | 7,598.0 | 6.3% |
| Individual Income Tax | 65,021.2 | 82,248.2 | 26.5% | 46,567.1 | 37,839.7 | 23.1% |
| Corporation Franchise Tax | 1,620.9 | 1,503.2 | -7.3% | 5,237.7 | 5,637.0 | -7.1% |
| Production ---------- | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,207.2 | NA | NA | NA | 1,107.8 | NA |
| Crude Oil to Refineries (thous. of bbls.) | 4,045.3 | 3,874.5 | -4.2% | 3,906.1 | 3,677.1 | 6.2% |
| Crude Oil (thous. of bbls.) | 3,157.0 | 2,902.0 | -8.1% | 3,006.3 | 3,408.4 | -11.8% |
| Natural Gas (mil. of cu. ft.) | 18,740.2 | 19,933.4 | 6.4% | 20,557.6 | 18,958.8 | 8.4% |
| Coal (thous. short tons) | 919.0 | 1,501.0 | 63.3% | 1,002.6 | 1,063.3 | -5.7% |
| Tourism/Travel ---------- | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 997,799 | 1,017,714 | 2.0% | 842,472 | 802,639 | 5.0% |
| Highway Traffic Count Across State Lines | 53,409 | 51,569 | -3.4% | 37,981 | 35,850 | 5.9% |
| Transient Room Taxes (thous. of dol.) | 709.6 | 263.6 | -62.9% | 439.4 | 451.7 | -2.7% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 2,101.7 | 2,113.9 | 0.6% | 1,028.5 | 999.9 | 2.9% |
| Utilities ---------- | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 469,453 | 478,165 | 1.9% | 477,692 | 468,930 | 1.9% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 168,474 | 176,545 | 4.8% | 173,536 | 166,952 | 3.9% |
| Electric Customers (Residential) | 458,309 | 476,689 | 4.0% | 469,704 | NA | NA |
| Electric Customers (Commercial) | 45,521 | 46,082 | 1.2% | 46,023 | NA | NA |
| Natural Gas Customers (Residential & Commercial) | 430,326 | 441,846 | 2.7% | 443,328 | 431,305 | 2.8% |
| Natural Gas Customers (Industrial) | 573 | 550 | -4.0% | 560 | 568 | -1.4% |

# Utah Business Statistics

| UTAH DATA | August 1986 | August 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| **Davis County** | | | | | | |
| Non-Ag. Employment (thous.) | 53.8$^{r}$ | 54.1$^{fo}$ | 0.6% | 53.3 | 53.3 | 0.0% |
| Unemployment Rate | 4.4$^{r}$ | 5.2 | 18.2% | 5.2 | 4.1 | 28.2% |
| Auth. Permit Construction (thous. of dol.) | 23,535.2 | 14,995.8 | -36.3% | 13,580.2 | 16,620.7 | -18.3% |
| New Dwelling Units (no.) | 388 | 113 | -70.9% | 107 | 230 | -53.5% |
| Postal Receipts (thous. of dol.) | 326.4 | 301.0 | -7.8% | NA | 324.9 | NA |
| Electric Customers (Residential) | 45,223 | 47,162 | 4.3% | 46,713 | 40,882 | 14.3% |
| Electric Customers (Commercial) | 3,343 | 3,238 | -3.1% | 3,250 | 3,023 | 7.5% |
| Natural Gas Customers (Residential) | 46,087 | 48,483 | 5.2% | 48,165 | 45,550 | 5.7% |
| Natural Gas Customers (Industrial) | 51 | 52 | 2.0% | 52 | 50 | 3.8% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 53,411 | 55,382 | 3.7% | 54,491 | 51,755 | 5.3% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,209 | 10,707 | 4.9% | 10,405 | 9,940 | 4.7% |
| **Salt Lake County** | | | | | | |
| Non-Ag. Employment (thous.) | 330$^{r}$ | 335.5$^{fo}$ | 1.7% | 334.4 | 328.7 | 1.7% |
| Unemployment Rate | 4.8$^{r}$ | 5.3 | 10.4% | 5.5 | 5.5 | -0.5% |
| Auth. Permit Construction (thous. of dol.) | 65,040.5 | 40,130.1 | -38.3% | 45,876.4 | 62,275.1 | -26.3% |
| New Dwelling Units (no.) | 461 | 208 | -54.9% | 307.0 | 579.8 | -47.1% |
| Postal Receipts (thous. of dol.) | 6,842 | 6,449.8 | -5.7% | 7,017.0 | 7,437.4 | -5.7% |
| Electric Customers (Residential) | 230,145 | 235,258 | 2.2% | 234,962 | 229,105 | 2.6% |
| Electric Customers (Commercial) | 19,385 | 19,804 | 2.2% | 19,729 | 19,077 | 3.4% |
| Natural Gas Customers (Residential) | 209,983 | 214,247 | 2.0% | 216,184 | 210,325 | 2.8% |
| Natural Gas Customers (Industrial) | 256 | 235 | -8.2% | 246 | 258 | -4.7% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 222,680 | 226,538 | 1.7% | 225,605 | 220,831 | 2.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 107,914 | 110,396 | 2.3% | 109,344 | 107,208 | 2.0% |
| **Utah County** | | | | | | |
| Non-Ag. Employment (thous.) | 69.8$^{r}$ | 70.8$^{fo}$ | 1.4% | 72.1 | 71.8 | 0.3% |
| Unemployment Rate | 6.9$^{r}$ | 6.9 | 0.0% | 7.5 | 6.1 | 21.9% |
| Auth. Permit Construction (thous. of dol.) | 6,299.6 | 13,350.0 | 111.9% | 12,034.1 | 10,379.9 | 15.9% |
| New Dwelling Units (no.) | 60 | 79 | 31.7% | 98 | 101 | -3.1% |
| Postal Receipts (thous. of dol.) | 837.6 | 839.0 | 0.2% | 928.3 | 916.7 | 1.3% |
| Electric Customers (Residential) | 50,032 | 57,761 | 15.4% | 51,000 | NA | NA |
| Electric Customers (Commercial) | 6,275 | 6,363 | 1.4% | 6,341 | NA | NA |
| Natural Gas Customers (Residential) | 58,927 | 59,799 | 1.5% | 60,113 | 59,242 | 1.5% |
| Natural Gas Customers (Industrial) | 73 | 68 | -6.8% | 71 | 71 | 0.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 59,976 | 61,048 | 1.8% | 62,467 | 61,811 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 15,940 | 18,591 | 16.6% | 17,729 | 15,562 | 13.9% |
| **Weber County** | | | | | | |
| Non-Ag. Employment (thous.) | 60.8$^{r}$ | 61.3$^{fo}$ | 0.8% | 60.3 | 59.0 | 2.2% |
| Unemployment Rate | 5.8$^{r}$ | 6.9 | 19.0% | 7.1 | 5.8 | 22.3% |
| Auth. Permit Construction (thous. of dol.) | 19,781.6 | 15,691.9 | -20.7% | 8,887.6 | 9,359.8 | -5.0% |
| New Dwelling Units (no.) | 92 | 96 | 4.3% | 75.1 | 98.9 | -24.1% |
| Postal Receipts (thous. of dol.) | 614.4 | 572.3 | -6.9% | 619.1 | 610.0 | 1.5% |
| Electric Customers (Residential) | 51,790 | 52,740 | 1.8% | 52,550 | 51,409 | 2.2% |
| Electric Customers (Commercial) | 4,745 | 4,863 | 2.5% | 4,805 | 4,708 | 2.1% |
| Natural Gas Customers (Residential) | 47,466 | 48,387 | 1.9% | 48,802 | 47,648 | 2.4% |
| Natural Gas Customers (Industrial) | 87 | 85 | -2.3% | 85 | 87 | -1.9% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,541 | 45,983 | 1.0% | 45,771 | 45,301 | 1.0% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,624 | 11,109 | 4.6% | 10,792 | 10,546 | 2.3% |

$^{r}$ Revised $^{na}$ Not available $^{fo}$ Forecast

Sources:

| | |
|---|---|
| **Personal Income:** | Bureau of Economic Analysis, U.S. Department of Commerce |
| **New Corporations:** | Utah Secretary of State |
| **New Car and Truck Sales:** | Utah State Tax Commission, Economic and Statistical Unit |
| **Agriculture:** | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| **Construction Data:** | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| **Employment Data:** | Utah Department of Employment Security |
| **Savings Information:** | Utah Savings and Loan Institutions |
| **Tax Collections:** | Utah State Tax Commission |
| **Net Electric Power Utilized:** | Cooperating Utah power companies |
| **Crude Oil Production:** | Area oil refineries |
| **Natural Gas Production:** | Utah Department of Oil, Gas, and Mining |
| **Coal Production:** | U.S. Department of Energy |
| **Air Passengers:** | Salt Lake City International Airport, Statistics Division |
| **Highway Traffic Count:** | Utah Department of Transportation |
| **Visits to State and National Parks and Monuments:** | U. S. Forest Service, Utah State Parks and Recreation Department |
| **Utilities Data:** | Cooperating Utah utility companies |
| **Postal Receipts:** | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics
[2] Obtained from Utah Construction Report
[3] Includes services by nonprofit and religious institutions
[4] Includes public schools and college institutions

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| NATIONAL DATA | August 1986 | August 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,240.7$^r$ | 4,520.5 | 6.6% | 4,377.2 | 4,166.2 | 5.1% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,552.9$^r$ | 3,756.1 | 5.7% | 3,662.8 | 3,469.5 | 5.6% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 124.9$^r$ | 131.0 | 4.9% | 127.4 | 124.7 | 2.2% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 375.5$^r$ | 398.0 | 6.0% | 382.1 | 382.9 | -0.2% |
| Index of Leading Indicators (1967=100) | 180.3$^r$ | 192.7 | 6.9% | 186.8 | 175.6 | 6.4% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1967=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 328.6 | 342.7 | 4.3% | 335.4 | 326.8 | 2.6% |
| CPI-U (All Urban Consumers) Food & Beverages | 314.6 | 325.4 | 3.4% | 320.9 | 315.1 | 1.8% |
| CPI-U (All Urban Consumers) Housing | 362.4 | 374.9 | 3.4% | 366.8 | 357.6 | 2.6% |
| CPI-U (All Urban Consumers) Transportation | 334.7 | 320.2 | -4.3% | 310.5 | 316.5 | -1.9% |
| CPI-U (All Urban Consumers) Medical Care | 437.5 | 466.1 | 6.5% | 453.2 | 422.9 | 7.2% |
| CPI-U (All Urban Consumers) Energy | 358.6 | 388.9 | 8.4% | 362.2 | 396.8 | -8.7% |
| Producer Price Index (not seasonally adjusted) (1967=100) | | | | | | |
| Producer Price Index, All Finished Goods | 288.3 | 297.2 | 3.1% | 293.2 | 291.4 | 0.6% |
| GNP Price Deflator (1982=100) (qtly.) | 114.7$^r$ | 117.9 | 2.8% | 116.2 | 113.2 | 2.7% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 118.1 | 120.0 | 1.6% | 119.2 | 117.0 | 1.8% |
| Total Civilian Employment (mil.) | 110.1 | 113.0 | 2.6% | 111.4 | 108.8 | 2.4% |
| Unemployment Rate | 6.8$^r$ | 6.0 | -11.8% | 6.5 | 7.0 | -7.5% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 20,489.4 | 23,914.4 | 16.7% | 20,349.4 | 18,942.4 | 7.4% |
| Residential | 10,145.0 | 10,919.2 | 7.6% | 9,766.6 | 9,246.3 | 5.6% |
| Nonresidential | 6,788.1 | 8,357.8 | 23.1% | 6,859.3 | 6,354.3 | 7.9% |
| Non-Building | 3,556.3 | 4,637.4 | 30.4% | 3,698.5 | 3,341.8 | 10.7% |
| New Dwelling Units (no.) | 144,135 | 141,461 | -1.9% | 132,087 | 141,335 | -6.5% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 5.57 | 6.00 | 7.7% | 5.57 | 6.58 | -15.4% |
| Long Term (30-year Treasury bond yields) | 7.72 | 8.97 | 16.2% | 8.16 | 8.92 | -8.5% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 7.90 | 8.25 | 4.4% | 7.76 | 9.00 | -13.8% |
| Mortgage Rates (new homes) | 9.84 | 9.01 | -8.4% | 9.14 | 10.17 | -10.1% |

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

F.W. Dodge Report, McGraw-Hill: National Construction Data.

Survey of Current Business, U.S. Department of Commerce: New Home Mortgage Rates.

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Indexes.

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# 1987 POPULATION ESTIMATES FOR UTAH

Brad T. Barber and Jeanine M. Taylor
State Office of Planning and Budget

The Population Estimates Committee has estimated that the population of Utah reached 1,678,000 as of July 1, 1987, which represents an increase of 13,000, or 0.8 percent over the 1986 revised estimate of 1,665,000. The U.S. population increase was 0.9 percent during the same period. The last time Utah's population grew by 13,000 or fewer was in 1968. The yearly percent increase in population has been greater than 0.8 percent in every year since 1964, when the population in Utah grew by only 0.4 percent.

The population estimate as of July 1, 1980, was 1,474,000 inhabitants for the state. Over the past seven years the population has grown by approximately 204,000 persons, which translates into a 1.9 percent average annual growth rate for the 1980's compared to an average annual growth rate of 3.3 percent for the 1970's. Comparable national average annual growth rates are 1.1 percent in the 1970's and 1.0 percent in the 1980's. This dramatic slowdown in Utah's population growth in recent years has been caused by a combination of out-migration (as a result of weakened economic conditions) as well as a decline in natural increase (births minus deaths).

Utah had an extended period of net in-migration each year from 1969 to 1983; however, for the fourth consecutive year net out-migration has occurred. Once again natural increase has accounted for all of the state's population growth. Net out-migration for the period July 1, 1986 to July 1, 1987 is estimated at 13,500. This is significantly higher than the approximate 8,500 estimated for the previous 12 months, and the highest level of out-migration since 1964 (when an estimated 14,000 left the state). The 1987 rate of out-migration is 0.8 percent, which means that 0.8 percent of the 1986 population left the state during the year.

The rate of out-migration was once again highest in Utah's rural counties, many of which were impacted by th further decline in energy development. These counti include Beaver, Carbon, Duchesne, Emery, Grand, Millar Rich, Uintah and Wayne. In fact, these counties had ne out-migration which exceeded natural increase, resulting in a decline in total population.

## Table 1
## Utah Population Density by County
## 1986 and 1987

| | Land Area | | July 1, 1986 | | | July 1, 1987 | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Population | | | Population | |
| County | Sq. Mi. | Sq. Km. | Population Estimate | per Sq. Mi. | per Sq. Km. | Population Estimate | per Sq. Mi. | per Sq. Km. |
| Beaver | 2,586 | 6,698 | 4,950 | 1.9 | 0.7 | 4,900 | 1.9 | 0.7 |
| Box Elder | 5,614 | 14,539 | 37,300 | 6.6 | 2.6 | 37,800 | 6.7 | 2.6 |
| Cache | 1,171 | 3,033 | 67,800 | 57.9 | 22.4 | 69,200 | 59.1 | 22.8 |
| Carbon | 1,479 | 3,831 | 23,000 | 15.6 | 6.0 | 22,400 | 15.1 | 5.8 |
| Daggett | 699 | 1,810 | 700 | 1.0 | 0.4 | 700 | 1.0 | 0.4 |
| Davis | 299 | 775 | 175,000 | 585.3 | 225.8 | 179,000 | 598.7 | 231.0 |
| Duchesne | 3,234 | 8,375 | 14,300 | 4.4 | 1.7 | 13,700 | 4.2 | 1.6 |
| Emery | 4,449 | 11,523 | 11,800 | 2.7 | 1.0 | 11,600 | 2.6 | 1.0 |
| Garfield | 5,148 | 13,333 | 4,050 | 0.8 | 0.3 | 4,050 | 0.8 | 0.3 |
| Grand | 3,689 | 9,554 | 6,850 | 1.9 | 0.7 | 6,700 | 1.8 | 0.7 |
| Iron | 3,302 | 8,551 | 19,500 | 5.9 | 2.3 | 19,500 | 5.9 | 2.3 |
| Juab | 3,396 | 8,796 | 5,800 | 1.7 | 0.7 | 5,800 | 1.7 | 0.7 |
| Kane | 3,898 | 10,095 | 4,800 | 1.2 | 0.5 | 4,850 | 1.2 | 0.5 |
| Millard | 6,818 | 17,659 | 13,600 | 2.0 | 0.8 | 13,200 | 1.9 | 0.7 |
| Morgan | 603 | 1,562 | 5,500 | 9.1 | 3.5 | 5,650 | 9.4 | 3.6 |
| Piute | 759 | 1,965 | 1,550 | 2.0 | 0.8 | 1,550 | 2.0 | 0.8 |
| Rich | 1,034 | 2,679 | 2,050 | 2.0 | 0.8 | 1,950 | 1.9 | 0.7 |
| Salt Lake | 756 | 1,959 | 697,000 | 922.0 | 355.8 | 700,000 | 925.9 | 357.3 |
| San Juan | 7,725 | 20,008 | 12,700 | 1.6 | 0.6 | 12,900 | 1.7 | 0.6 |
| Sanpete | 1,586 | 4,109 | 16,500 | 10.4 | 4.0 | 16,600 | 10.5 | 4.0 |
| Sevier | 1,910 | 4,946 | 15,800 | 8.3 | 3.2 | 15,800 | 8.3 | 3.2 |
| Summit | 1,865 | 4,831 | 12,700 | 6.8 | 2.6 | 13,200 | 7.1 | 2.7 |
| Tooele | 6,919 | 17,921 | 28,100 | 4.1 | 1.6 | 28,100 | 4.1 | 1.6 |
| Uintah | 4,479 | 11,600 | 23,000 | 5.1 | 2.0 | 21,900 | 4.9 | 1.9 |
| Utah | 2,018 | 5,226 | 253,000 | 125.4 | 48.4 | 257,000 | 127.4 | 49.2 |
| Wasatch | 1,191 | 3,084 | 9,450 | 7.9 | 3.1 | 9,700 | 8.1 | 3.1 |
| Washington | 2,422 | 6,272 | 39,100 | 16.1 | 6.2 | 41,200 | 17.0 | 6.6 |
| Wayne | 2,461 | 6,373 | 2,100 | 0.9 | 0.3 | 2,050 | 0.8 | 0.3 |
| Weber | 566 | 1,465 | 157,000 | 277.4 | 107.2 | 157,000 | 277.4 | 107.2 |
| State Total | 82,076 | 212,572 | 1,665,000 | 20.3 | 7.8 | 1,678,000 | 20.4 | 7.9 |

Source: Land area: Bureau of the Census, Census of Population, Number of Inhabitants, Utah 1980. PC80-1-A46 (Washington, D.C., Government Printing Service).

Most of Utah's population increase occurred in three of the Wasatch Front Counties: Davis, Salt Lake, and Utah. Salt Lake County increased by 3,000, while Utah and Davis each showed an increase of 4,000. These three counties collectively accounted for over 80 percent of the total growth in the state. Although Washington County was once again the fastest growing county in the state with a growth rate of 5.4 percent, this was only half of the growth rate shown in 1986. Summit County was the second fastest growing county in the state, with 3.9 percent. Cache, Davis, Morgan and Wasatch Counties also experienced growth rates greater than 2 percent for the year.

The Population Estimates Committee has revised its 1986 state estimate in order to reach a consensus with the U.S. Bureau of the Census on the state level. This assures consistency between state total population estimates published by the Bureau of the Census and the Population Estimates Committee. However, the Committee's county estimates may still differ from those of the Census Bureau.

Figure 1 gives the absolute and percentage changes in population for each of the counties from 1986 to 1987. Table 1 shows the population density for each county using the 1980 Census land area. Table 2 presents the revised population estimates for the Multi-County Planning Districts for 1980-1987; 1980-87 county estimates can be found in Table 3. Table 4 shows births, deaths and natural increase for the calendar years 1960-1986. Table 5 presents natural increase and total net migration by county, by fiscal year, for the revised 1985-1986 period and for 1986-1987. Table 6 presents the derivation of the Committee's preliminary July 1, 1987 estimates based on the July 1, 1986 revised county and state population estimates. The revised intercensal population estimates for 1970-1980 are available in the Utah Economic and Business Review, September, 1981, Vol. 41, No. 9.

## Organization and Procedure

Coordination and staffing of the Utah Population Estimates Committee is the responsibility of the Data Resources Section of the Utah State Office of Planning and Budget. The Data Resources Section contains the Utah State Census Data Center. The Committee's estimates represent the official estimate for the state and its counties. The Committee is made up of representatives from the Utah State Departments of Health, Employment Security, Social Services, Education, Planning and Budget and staff of local universities, businesses and research organizations and the Church of Jesus Christ of Latter-day Saints (LDS).

Table 2
Population Estimates for Utah
by Multi-County District

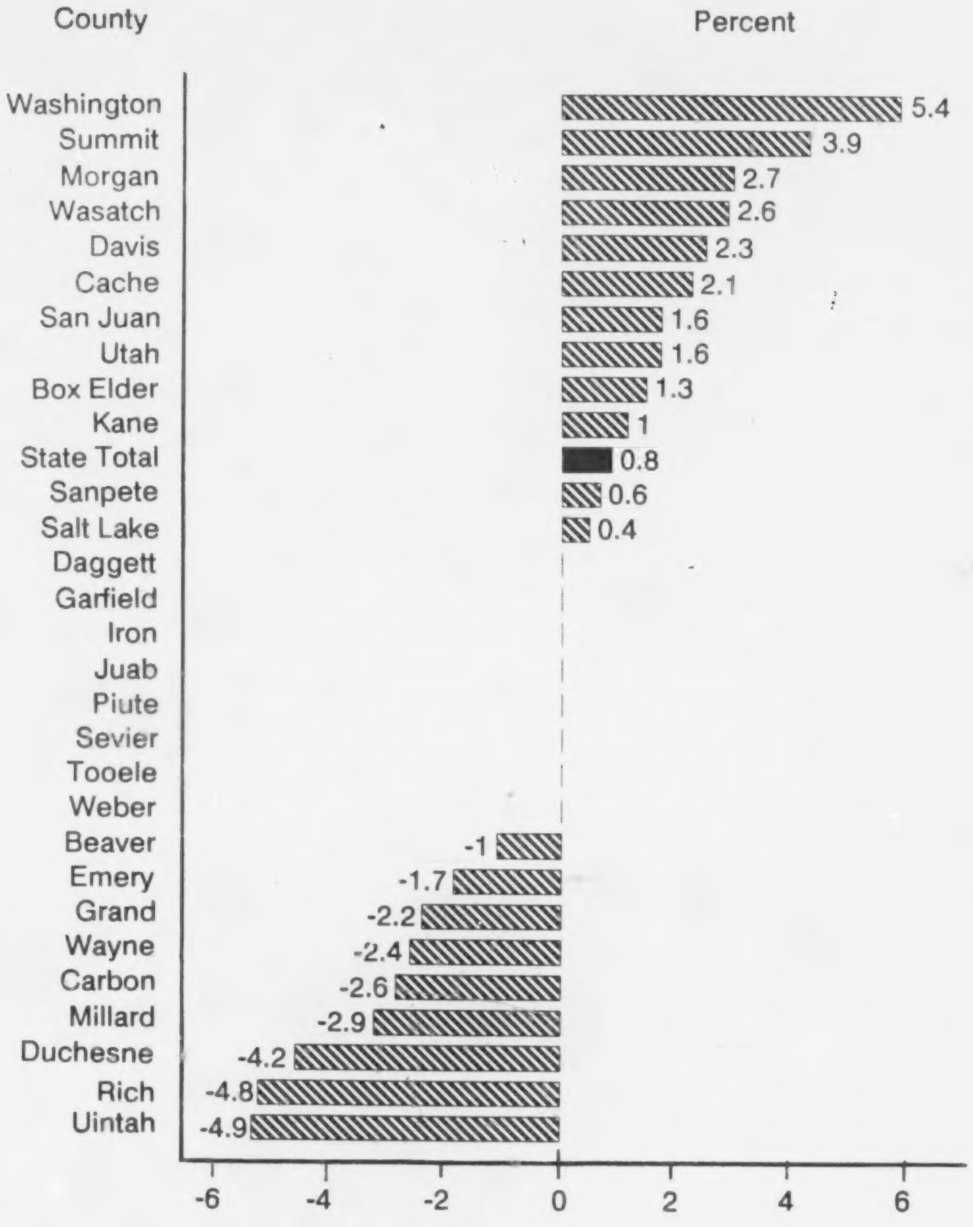
| | July 1 1980 | July 1 1981* | July 1 1982* | July 1 1983 | July 1 1984* | July 1 1985 | July 1 1986* | July 1 1987** |
|---|---|---|---|---|---|---|---|---|
| State Total | 1,474,000 | 1,516,000 | 1,559,000 | 1,596,000 | 1,624,000 | 1,645,000 | 1,665,000 | 1,678,000 |
| Bear River | 93,350 | 96,050 | 99,100 | 102,100 | 103,550 | 105,400 | 107,150 | 108,950 |
| Wasatch Front North | 297,950 | 306,050 | 314,200 | 321,250 | 326,350 | 330,450 | 337,500 | 341,650 |
| Wasatch Front South | 651,200 | 666,800 | 682,100 | 694,300 | 707,200 | 717,300 | 725,100 | 728,100 |
| Mountainland | 239,050 | 247,800 | 255,050 | 262,850 | 268,400 | 271,600 | 275,150 | 279,900 |
| Central | 47,600 | 49,200 | 51,050 | 53,600 | 56,400 | 57,200 | 55,350 | 55,000 |
| Southwest | 56,050 | 57,950 | 60,250 | 62,900 | 65,500 | 68,900 | 72,400 | 74,500 |
| Uintah Basin | 34,150 | 35,850 | 38,850 | 40,450 | 40,050 | 39,400 | 38,000 | 36,300 |
| Southeast | 54,650 | 56,300 | 58,400 | 58,550 | 56,550 | 54,750 | 54,350 | 53,600 |

*Revised
**Preliminary

# Figure 1

## Percent Change in Population by County

## July 1, 1986 to July 1, 1987



Source: Population Estimates Committee

### Table 3
### Revised Population Estimates by County

| County | July 1 1980 | July 1 1981* | July 1 1982* | July 1 1983 | July 1 1984* | July 1 1985 | July 1 1986* | July 1 1987** |
|---|---|---|---|---|---|---|---|---|
| Beaver | 4,400 | 4,600 | 4,650 | 5,000 | 5,150 | 5,050 | 4,950 | 4,900 |
| Box Elder | 33,500 | 34,000 | 34,700 | 35,300 | 35,800 | 36,600 | 37,300 | 37,800 |
| Cache | 57,700 | 59,800 | 62,000 | 64,500 | 65,600 | 66,700 | 67,800 | 69,200 |
| Carbon | 22,400 | 23,100 | 24,700 | 24,500 | 23,700 | 23,400 | 23,000 | 22,400 |
| Daggett | 750 | 850 | 850 | 750 | 750 | 700 | 700 | 700 |
| Davis | 148,000 | 153,000 | 158,000 | 162,000 | 166,000 | 170,000 | 175,000 | 179,000 |
| Duchesne | 12,700 | 13,100 | 13,700 | 14,400 | 14,800 | 14,700 | 14,300 | 13,700 |
| Emery | 11,600 | 12,100 | 13,000 | 13,100 | 12,400 | 11,800 | 11,800 | 11,600 |
| Garfield | 3,700 | 3,700 | 3,750 | 3,950 | 3,950 | 4,050 | 4,050 | 4,050 |
| Grand | 8,250 | 8,400 | 8,100 | 7,950 | 7,650 | 7,050 | 6,850 | 6,700 |
| Iron | 17,500 | 17,900 | 18,300 | 18,900 | 19,300 | 19,400 | 19,500 | 19,500 |
| Juab | 5,550 | 5,600 | 5,700 | 5,900 | 6,150 | 6,250 | 5,800 | 5,800 |
| Kane | 4,050 | 4,050 | 4,150 | 4,350 | 4,500 | 4,700 | 4,800 | 4,850 |
| Millard | 9,050 | 9,600 | 10,400 | 11,400 | 13,500 | 14,200 | 13,600 | 13,200 |
| Morgan | 4,950 | 5,050 | 5,200 | 5,250 | 5,350 | 5,450 | 5,500 | 5,650 |
| Piute | 1,350 | 1,400 | 1,350 | 1,450 | 1,500 | 1,550 | 1,550 | 1,550 |
| Rich | 2,150 | 2,250 | 2,400 | 2,300 | 2,150 | 2,100 | 2,050 | 1,950 |
| Salt Lake | 625,000 | 640,000 | 655,000 | 667,000 | 679,000 | 689,000 | 697,000 | 700,000 |
| San Juan | 12,400 | 12,700 | 12,600 | 13,000 | 12,800 | 12,500 | 12,700 | 12,900 |
| Sanpete | 14,800 | 15,400 | 16,100 | 16,900 | 17,000 | 16,900 | 16,500 | 16,600 |
| Sevier | 14,900 | 15,200 | 15,500 | 15,800 | 16,100 | 16,200 | 15,800 | 15,800 |
| Summit | 10,400 | 10,900 | 11,300 | 11,800 | 12,200 | 12,400 | 12,700 | 13,200 |
| Tooele | 26,200 | 26,800 | 27,100 | 27,300 | 28,200 | 28,300 | 28,100 | 28,100 |
| Uintah | 20,700 | 21,900 | 24,300 | 25,300 | 24,500 | 24,000 | 23,000 | 21,900 |
| Utah | 220,000 | 228,000 | 235,000 | 242,000 | 247,000 | 250,000 | 253,000 | 257,000 |
| Wasatch | 8,650 | 8,900 | 8,750 | 9,050 | 9,200 | 9,200 | 9,450 | 9,700 |
| Washington | 26,400 | 27,700 | 29,400 | 30,700 | 32,600 | 35,700 | 39,100 | 41,200 |
| Wayne | 1,950 | 2,000 | 2,000 | 2,150 | 2,150 | 2,100 | 2,100 | 2,050 |
| Weber | 145,000 | 148,000 | 151,000 | 154,000 | 155,000 | 155,000 | 157,000 | 157,000 |
| State Total | 1,474,000 | 1,516,000 | 1,559,000 | 1,596,000 | 1,624,000 | 1,645,000 | 1,665,000 | 1,678,000 |

*Revised
**Preliminary

The Committee's participation in the Federal-State Cooperative Program for Local Population Estimates provides an opportunity for exchange of data and other information between the Committee and the Bureau of the Census. The intent of this exchange is to improve the quality of estimates of population for the state and its counties by both parties. A major goal of the Committee is to strive for agreement in its estimates and the estimates produced by the Bureau of the Census.

At its December 1987 meeting, the Committee reviewed the state population estimates derived from vital statistics, school enrollment, and L.D.S. Church membership data. Employment growth was used as a supplemental data source after the estimates were derived to assure consistency between the magnitude and direction of growth for employment and population.

## Methodology for Estimating Population

For the past several years the Utah Population Estimates Committee has utilized two population estimating methods--school enrollment and L.D.S. Church membership--in calculating its state and county estimates.

Two years ago the Committee was able to obtain federal tax return net exemption data for the prior four years. These tax data were used in addition to the previously mentioned methods to estimate the 1981 through 1984 population estimates on the county level, with adjustment in a few counties because of atypical growth experiences. However, due to several problems these data have not been used since. Continued evaluation and research is being done in the event the tax return information can be used in future years.

### School Enrollment Method

The school enrollment method utilizes data from birth and death records in county of residence as a measure of the natural increase and fall school enrollment changes as an indicator of net migration.

Natural Increase - Natural increase for any year is defined as the number of births minus the number of deaths occurring to area residents in that year. The 1987 population estimates are based on the number of resident births and deaths that occurred from July 1, 1986 to June 30, 1987. The number of births and deaths occurring to Utah residents for the calendar years 1960-1986 is shown in Table 4. Births in fiscal year 1987 (July 1, 1986 through June 30, 1987) were 35,469, the lowest number of births in Utah since fiscal year 1976, when births were 33,773. The largest number of births occurred in fiscal year 1981 at 41,582, and the number has declined in each year since.

Table 4
Resident Utah Births,
Deaths, and Natural Increase
Calendar Years 1960-1986

| 1960 | Births | Deaths | Natural Increase |
|---|---|---|---|
| 1960 | 26,272 | 5,996 | 20,276 |
| 1961 | 25,590 | 6,081 | 19,509 |
| 1962 | 26,213 | 6,325 | 19,888 |
| 1963 | 24,952 | 6,544 | 18,408 |
| 1964 | 23,844 | 6,404 | 17,440 |
| 1965 | 22,261 | 6,672 | 15,589 |
| 1966 | 22,601 | 6,850 | 15,751 |
| 1967 | 22,948 | 6,516 | 16,432 |
| 1968 | 23,193 | 6,882 | 16,311 |
| 1969 | 24,232 | 6,791 | 17,441 |
| 1970 | 26,969 | 7,063 | 19,906 |
| 1971 | 27,552 | 7,245 | 20,307 |
| 1972 | 26,911 | 7,323 | 19,588 |
| 1973 | 27,978 | 7,573 | 20,405 |
| 1974 | 29,946 | 7,380 | 22,566 |
| 1975 | 31,667 | 7,519 | 24,148 |
| 1976 | 35,310 | 7,472 | 27,838 |
| 1977 | 37,956 | 7,612 | 30,344 |
| 1978 | 38,811 | 7,871 | 30,940 |
| 1979 | 41,078 | 7,871 | 33,207 |
| 1980 | 41,786 | 8,103 | 33,683 |
| 1981 | 41,286 | 8,263 | 33,023 |
| 1982 | 41,537 | 8,502 | 33,035 |
| 1983 | 39,441 | 8,484 | 30,957 |
| 1984 | 38,286 | 8,944 | 29,342 |
| 1985 | 37,441 | 9,044 | 28,397 |
| 1986 | 36,383 | 8,886 | 27,497 |

Source: Bureau of Health Statistics, Utah Department of Health (Salt Lake City).

The crude birth rate (births during the calendar year per 1,000 population on July 1st) has dropped from 28.3 in 1980 to 21.9 in 1986. The U.S. crude birth rate held virtually constant during this same period registering 15.9 in 1980 and 15.5 in 1986. The significant decline in the absolute number of births and in the crude birth rate during the last five years has signaled a major demographic change in Utah.

Utah continues to have the highest total fertility rate in the nation. The total fertility rate for a given year shows how many births the average woman would have during her entire childbearing period (ages 15 to 44), if during this time she were to experience the same age-specific birth rates that occurred for childbearing-age women in that given year. This rate has been falling in Utah since 1980, from 3.2 births per woman to an estimated 2.6 births in 1986. The U.S. total fertility rate has held at an almost constant rate of 1.8 births per woman since the mid-1970's.

With only occasional reversals, the total number of deaths has increased each year since 1960; however, deaths per thousand population have decreased from 6.7 in 1960 to 5.5 in 1980. This rate has shown a small decline in the 1980's, with an estimated 5.3 deaths per thousand population in 1986.

Migration Estimates - Natural increase is an actual count of the births and deaths occurring annually. However, since states and counties do not collect migration statistics, migration is an estimate. The Utah Population Estimates Committee, like the Bureau of the Census, relies heavily upon school enrollment data as an indicator of migration.

To estimate net migration within the state and its counties for the school enrollment method, the Committee compares the survived enrollment (calculated by applying survival rates to the previous year's enrollment) in grades one through eight of the previous school year to grades two through nine of the present year. The difference between these two enrollment totals is taken to be net student migration for the area being estimated.

Total net migration for each county is derived by multiplying the county student migration estimate by the county population-to-student ratio. This ratio is defined as the total population estimate of the county for the previous year divided by the school enrollment of grades one through eight of the previous year. The school enrollment method population estimate is then obtained by adding natural increase and estimated net migration to the previous year's population estimate.

The school enrollment method, as described above, is limited in estimating migration among the retired, college students, single persons and other groups that are not represented in school enrollment estimates. The Committee supplements these estimates, therefore, with other migration indicators such as the change in L.D.S. membership and the count of employees on non-agricultural payrolls.

The net migration information shown in Table 5 is derived using the "residual method," that is, the residual of total population change minus natural increases is net migration. Net out-migration occurs when the total observed change in population is smaller than the natural increase alone. Net in-migration occurs when the observed population is greater than that measured by natural increase alone.

Table 5
Components of Change
1985 to 1986 and 1986 to 1987

| | 1985 to 1986 | | Preliminary 1986 to 1987 | |
|---|---|---|---|---|
| | Natural Increase | Net Migration* | Natural Increase | Net Migration* |
| Beaver | 32 | (138) | 41 | (102) |
| Box Elder | 612 | 138 | 532 | (224) |
| Cache | 1,359 | (220) | 1,242 | 222 |
| Carbon | 242 | (541) | 256 | (868) |
| Daggett | 11 | 5 | 8 | (25) |
| Davis | 3,085 | 2,082 | 3,159 | 957 |
| Duchesne | 305 | (636) | 248 | (688) |
| Emery | 185 | (163) | 159 | (385) |
| Garfield | 60 | (37) | 43 | (32) |
| Grand | 56 | (245) | 80 | (258) |
| Iron | 332 | (151) | 298 | (396) |
| Juab | 90 | (511) | 64 | (86) |
| Kane | 70 | 73 | 68 | (45) |
| Millard | 229 | (880) | 189 | (561) |
| Morgan | 53 | 7 | 78 | 60 |
| Piute | (3) | (21) | 5 | (18) |
| Rich | 35 | (68) | 21 | (108) |
| Salt Lake | 11,506 | (2,723) | 10,795 | (8,519) |
| San Juan | 163 | 34 | 184 | (73) |
| Sanpete | 225 | (624) | 140 | (11) |
| Sevier | 186 | (503) | 175 | (161) |
| Summit | 195 | 117 | 175 | 310 |
| Tooele | 354 | (546) | 366 | (317) |
| Uintah | 481 | (1,510) | 424 | (1,544) |
| Utah | 5,490 | (2,504) | 5,059 | (1,582) |
| Wasatch | 134 | 73 | 113 | 135 |
| Washington | 657 | 2,766 | 627 | 1,511 |
| Wayne | 25 | (55) | 27 | (67) |
| Weber | 2,186 | (754) | 2,080 | (2,051) |
| State Total | 28,355 | (7,535) | 26,656 | (15,128) |

*Based on unrounded population estimates

## Table 6
## Derivation of 1987 County Population Estimates

| | Revised July 1, 1986 Population Estimates | 1987 L.D.S. Membership Method | Fall 1987 School Enrollment Method | 1987 Population Estimates Average | July 1, 1987 Preliminary Population Estimates | 1986-87 Percentage Change |
|---|---|---|---|---|---|---|
| Beaver | 4,950 | 4,930 | 4,837 | 4,883 | 4,900 | -1.0 |
| Box Elder | 37,300 | 37,220 | 37,883 | 37,552 | 37,800 | 1.3 |
| Cache | 67,800 | 68,966 | 69,343 | 69,155 | 69,200 | 2.1 |
| Carbon | 23,000 | 22,503 | 22,295 | 22,399 | 22,400 | -2.6 |
| Daggett | 700 | 729 | 639 | 684 | 700 | 0.0 |
| Davis | 175,000 | 180,851 | 178,098 | 179,474 | 179,000 | 2.3 |
| Duchesne | 14,300 | 13,889 | 13,494 | 13,691 | 13,700 | -4.2 |
| Emery | 11,800 | 11,676 | 11,499 | 11,588 | 11,600 | -1.7 |
| Garfield | 4,050 | 4,077 | 4,043 | 4,060 | 4,050 | 0.0 |
| Grand | 6,850 | 6,731 | 6,629 | 6,680 | 6,700 | -2.2 |
| Iron | 19,500 | 19,440 | 19,379 | 19,409 | 19,500 | 0.0 |
| Juab | 5,800 | 5,962 | 5,627 | 5,795 | 5,800 | 0.0 |
| Kane | 4,800 | 4,757 | 4,927 | 4,842 | 4,850 | 1.0 |
| Millard | 13,600 | 13,503 | 12,851 | 13,177 | 13,200 | -2.9 |
| Morgan | 5,500 | 5,570 | 5,698 | 5,634 | 5,650 | 2.7 |
| Piute | 1,550 | 1,515 | 1,540 | 1,527 | 1,550 | 0.0 |
| Rich | 2,050 | 2,023 | 1,893 | 1,958 | 1,950 | -4.9 |
| Salt Lake | 697,000 | 702,502 | 696,996 | 699,749 | 700,000 | 0.4 |
| San Juan | 12,700 | 12,817 | 12,829 | 12,823 | 12,900 | 1.6 |
| Sanpete | 16,500 | 16,516 | 16,719 | 16,617 | 16,600 | 0.6 |
| Sevier | 15,800 | 15,670 | 15,967 | 15,818 | 15,800 | 0.0 |
| Summit | 12,700 | 12,916 | 13,504 | 13,210 | 13,200 | 3.9 |
| Tooele | 28,100 | 28,129 | 28,138 | 28,134 | 28,100 | 0.0 |
| Uintah | 23,000 | 22,260 | 21,454 | 21,857 | 21,900 | -4.8 |
| Utah | 253,000 | 256,449 | 257,055 | 256,752 | 257,000 | 1.6 |
| Wasatch | 9,450 | 9,569 | 9,789 | 9,679 | 9,700 | 2.6 |
| Washington | 39,100 | 41,826 | 40,539 | 41,183 | 41,200 | 5.4 |
| Wayne | 2,100 | 2,062 | 2,016 | 2,039 | 2,050 | -2.4 |
| Weber | 157,000 | 156,615 | 156,933 | 156,774 | 157,000 | 0.0 |
| State Total | 1,665,000 | 1,681,672 | 1,672,613 | 1,677,143 | 1,678,000 | 0.8 |

As mentioned, Utah has had much lower levels of migration in the last few years. From July 1, 1980 to June 30, 1987, births were 272,607 and deaths were 60,274 for a net natural increase of 212,233. With an overall increase in population of approximately 204,000 persons since 1980, Utah has had over 8,000 net out-migration in the last seven years. This figure is a dramatic turnaround to the 151,556 net in-migration that occurred in Utah during the 1970's.

L.D.S. Membership Method

The L.D.S. Church annually audits its records and enumerates the members residing in each county of the state. The Committee uses this information to make current population estimates. The L.D.S. membership method uses a total population to L.D.S. membership ratio which is obtained by dividing the previous year's population by the L.D.S. membership of that year. This ratio is applied to the current L.D.S. membership to obtain a county population estimate. This method is relatively accurate in areas with high proportions of L.D.S. membership and low migration rates.

Local Coordination

At the Committee's December 1987 meeting, the tentative 1987 county and state population estimates were reviewed and approved. The respective county estimates were then sent to each county commission and to the seven Associations of Government for review and comment. Several telephone and written communications were received. These discussions have resulted in undertaking several data evaluation efforts in some counties to improve future reliability.

The local coordination effort is an important component of the estimation process. Although there will always be small differences between the Committee's estimates and estimates developed by local governments, it does assure the Committee that no major problems exist. The Committee is dedicated to keeping local governments informed of changes in estimation data and procedures.

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# Utah Business Statistics

| UTAH DATA | September 1986 | September 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,340 | 19,137 | 4.3% | 18,731 | 18,166 | 3.1% |
| New Corporations (no.) | 428 | 505 | 18.0% | 456 | 467 | -2.3% |
| New Car, Truck and Motorhome Sales (no.) | 8,463 | 5,441 | -35.7% | 5,122 | 6,332 | -19.1% |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 56.50 | 64.30 | 13.8% | 61.93 | 55.21 | 12.2% |
| Lambs (cwt) | 65.00 | 72.10 | 10.9% | 71.93 | 64.45 | 11.6% |
| Milk Wholesale (cwt) | 12.00 | 12.10 | 0.8% | 12.07 | 11.68 | 3.3% |
| Alfalfa Hay, Baled (per ton) | 62.00 | 72.00 | 16.1% | 65.67 | 69.89 | -6.0% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 38,518 | 44,540 | 15.6% | 40,773 | 36,015 | 13.2% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 141,897 | 124,506 | -12.3% | 122,939 | 130,813 | -6.0% |
| Residential | 59,408 | 56,305 | -5.2% | 56,552 | 57,851 | -2.2% |
| Nonresidential | 37,974 | 34,697 | -8.6% | 37,327 | 48,091 | -22.4% |
| Public Works and Utilities | 44,515 | 33,504 | -24.7% | 29,061 | 25,113 | 15.7% |
| Total Permit Construction (thous. of dol.) [2] | 105,867.2 | 76,628.3 | -27.6% | 93,950.1 | 119,736.8 | -21.5% |
| Residential | 63,416.3 | 35,681.5 | -43.7% | 45,760.0 | 64,401.8 | -28.9% |
| Nonresidential | 29,059.0 | 27,718.9 | -4.6% | 34,651.3 | 41,073.6 | -15.6% |
| Additions, Alterations and Repairs | 13,391.9 | 13,227.9 | -1.2% | 13,538.8 | 14,281.9 | -5.2% |
| New Dwelling Units (no.) | 1,079 | 509 | -52.8% | 704 | 1,274 | -44.7% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 767.3$^{r}$ | 757.4 | -1.3% | 760.8 | 752.5 | 1.1% |
| Total Employed Persons | 725.2$^{r}$ | 715.5 | -1.3% | 711.6 | 709.3 | 0.3% |
| Unemployed Persons | 42.2$^{r}$ | 41.9 | -0.7% | 49.1 | 42.8 | 14.7% |
| Percent Total Labor Force | 5.5$^{r}$ | 5.5 | 0.0% | 6.5 | 5.7 | 14.0% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 642.7$^{r}$ | 650.0 | 1.1% | 640.1 | 634.3 | 0.9% |
| Manufacturing | 91.6$^{r}$ | 94.4 | 3.1% | 92.0 | 92.9 | -1.1% |
| Mining | 7.4$^{r}$ | 8.0 | 8.1% | 8.2 | 8.3 | -0.7% |
| Contract Construction | 35.0$^{r}$ | 28.8 | -17.7% | 29.4 | 34.3 | -14.4% |
| Transportaion, Communication and Utilities | 37.4$^{r}$ | 38.1 | 1.9% | 37.6 | 37.1 | 1.3% |
| Wholesale Trade | 36.4$^{r}$ | 36.6 | 0.5% | 36.3 | 35.9 | 1.2% |
| Retail Trade | 118.9$^{r}$ | 120.3 | 1.2% | 119.1 | 116.0 | 2.7% |
| Finance, Insurance and Real Estate | 33.3$^{r}$ | 33.9 | 1.8% | 33.7 | 32.5 | 3.6% |
| Services [3] | 141.1$^{r}$ | 148.6 | 5.3% | 142.1 | 136.6 | 4.1% |
| Federal Government | 40.8$^{r}$ | 39.6 | -2.9% | 40.1 | 40.3 | -0.6% |
| State Government [4] | 36.4$^{r}$ | 36.3 | -0.3% | 37.4 | 37.5 | -0.5% |
| Local Government [4] | 64.5$^{r}$ | 65.5 | 1.6% | 64.3 | 62.9 | 2.3% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 40.8 | 40.9 | 0.2% | 39.7 | 40.4 | -1.7% |
| Mining | 40.9 | 39.1 | -4.4% | 42.1 | 43.4 | -3.1% |
| Wholesale Trade | 37.6 | 39.4 | 4.8% | 38.2 | 36.1 | 5.8% |
| Retail Trade | 28.5 | 29.3 | 2.8% | 28.4 | 28.0 | 1.3% |
| Amount of Unemployment Compensation (thous. of dol.) | 6,619.8 | 5,663.6 | -14.4% | 8,681.6 | 7,944.5 | 9.3% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,403.7 | 2,461.4 | 2.4% | 2,442.5 | 2,347.8 | 4.0% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 56,340.9 | 74,290.9 | 31.9% | 133,891.0 | 124,651.3 | 7.4% |
| Sales and Use Tax | 4,508.9 | 2,172.6 | -51.8% | 46,958.2 | 45,435.0 | 3.4% |
| Motor Fuel Tax | 7,637.6 | 13,100.9 | 71.5% | 8,533.3 | 7,637.8 | 11.7% |
| Individual Income Tax | 33,639.1 | 37,799.9 | 12.4% | 46,913.9 | 37,980.5 | 23.5% |
| Corporation Franchise Tax | 964.2 | 8,020.6 | 731.8% | 5,825.7 | 5,537.6 | 5.2% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,057.4 | NA | NA | NA | 1,105.4 | NA |
| Crude Oil to Refineries (thous. of bbls.) | 4,034.7 | 3,589.9 | -11.0% | 3,869.0 | 3,668.9 | 5.5% |
| Crude Oil (thous. of bbls.) | 2,942.5 | 2,955.1 | 0.4% | 3,007.3 | 3,356.5 | -10.4% |
| Natural Gas (mil. of cu. ft.) | 17,946.8 | 22,337.8 | 24.5% | 20,923.5 | 18,939.7 | 10.5% |
| Coal (thous. short tons) | 875.0 | 1,538.0 | 75.8% | 1,057.8 | 1,041.0 | 1.6% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 771,938 | 773,696 | 0.2% | 842,618 | 810,410 | 4.0% |
| Highway Traffic Count Across State Lines | 42,217 | 43,296 | 2.6% | 38,071 | 35,973 | 5.3% |
| Transient Room Taxes (thous. of dol.) | (146.7) | 32.2 | -121.9% | 454.4 | 425.7 | 6.7% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 1,229.2 | 1,482.9 | 20.6% | 1,049.7 | 1,003.4 | 4.6% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 474,690 | 480,810 | 1.3% | 478,202 | 469,900 | 1.8% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 169,711 | 177,268 | 4.5% | 174,166 | 167,341 | 4.1% |
| Electric Customers (Residential) | 463,000 | 479,247 | 3.5% | 471,058 | NA | NA |
| Electric Customers (Commercial) | 45,755 | 46,357 | 1.3% | 46,074 | NA | NA |
| Natural Gas Customers (Residential & Commercial) | 429,799 | 441,800 | 2.8% | 444,328 | 432,401 | 2.8% |
| Natural Gas Customers (Industrial) | 573 | 551 | -3.8% | 558 | 568 | -1.7% |

# Utah Business Statistics

| UTAH DATA | September 1986 | September 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| **Davis County** | | | | | | |
| Non-Ag. Employment (thous.) | 53.6[r] | 53.7[fo] | 0.2% | 53.3 | 53.3 | -0.0% |
| Unemployment Rate | 4.2[r] | 4.7 | 11.9% | 5.3 | 4.2 | 26.6% |
| Auth. Permit Construction (thous. of dol.) | 15,184.5 | 12,051.9 | -20.6% | 13,319.2 | 16,793.2 | -20.7% |
| New Dwelling Units (no.) | 140 | 79 | -43.6% | 101.9 | 226.8 | -55.1% |
| Postal Receipts (thous. of dol.) | 295.2 | 318.2 | 7.8% | NA | 322.9 | NA |
| Electric Customers (Residential) | 45,399 | 47,516 | 4.7% | 46,889 | 41,924 | 11.8% |
| Electric Customers (Commercial) | 3,193 | 3,271 | 2.4% | 3,256 | 3,086 | 5.5% |
| Natural Gas Customers (Residential) | 46,186 | 48,535 | 5.1% | 48,361 | 45,741 | 5.7% |
| Natural Gas Customers (Industrial) | 52 | 50 | -3.8% | 52 | 50 | 3.2% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 53,610 | 55,547 | 3.6% | 54,652 | 52,027 | 5.0% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,308 | 10,712 | 3.9% | 10,439 | 9,992 | 4.5% |
| **Salt Lake County** | | | | | | |
| Non-Ag. Employment (thous.) | 334.8[r] | 340.3[fo] | 1.6% | 334.9 | 329.1 | 1.8% |
| Unemployment Rate | 4.8[r] | 5.1 | 6.2% | 5.5 | 5.5 | 0.6% |
| Auth. Permit Construction (thous. of dol.) | 45,468.1 | 32,058.4 | -29.5% | 44,758.9 | 61,626.6 | -27.4% |
| New Dwelling Units (no.) | 445 | 186 | -58.2% | 285 | 575 | -50.4% |
| Postal Receipts (thous. of dol.) | 6,614.4 | 9,043.2 | 36.7% | 7,219.4 | 7,235.0 | -0.2% |
| Electric Customers (Residential) | 230,814 | 235,772 | 2.1% | 235,375 | 229,749 | 2.4% |
| Electric Customers (Commercial) | 19,322 | 19,966 | 3.3% | 19,783 | 19,138 | 3.4% |
| Natural Gas Customers (Residential) | 209,174 | 214,225 | 2.4% | 216,605 | 210,951 | 2.7% |
| Natural Gas Customers (Industrial) | 255 | 235 | -7.8% | 244 | 258 | -5.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 223,604 | 227,223 | 1.6% | 225,907 | 221,327 | 2.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 108,569 | 110,514 | 1.8% | 109,506 | 107,395 | 2.0% |
| **Utah County** | | | | | | |
| Non-Ag. Employment (thous.) | 73.5[r] | 75.3[fo] | 2.4% | 72.2 | 72.0 | 0.3% |
| Unemployment Rate | 7.0[r] | 5.9 | -15.7% | 7.4 | 6.3 | 17.8% |
| Auth. Permit Construction (thous. of dol.) | 7,572.1 | 8,996.7 | 18.8% | 12,152.8 | 9,499.3 | 27.9% |
| New Dwelling Units (no.) | 72 | 58 | -19.4% | 97 | 98 | -1.9% |
| Postal Receipts (thous. of dol.) | 849.0 | 866.4 | 2.0% | 929.7 | 915.2 | 1.6% |
| Electric Customers (Residential) | 50,998 | 59,463 | 16.6% | 51,705 | NA | NA |
| Electric Customers (Commercial) | 6,116 | 6,398 | 4.6% | 6,365 | NA | NA |
| Natural Gas Customers (Residential) | 59,077 | 59,804 | 1.2% | 60,173 | 59,348 | 1.4% |
| Natural Gas Customers (Industrial) | 72 | 69 | -4.2% | 71 | 71 | 0.0% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 64,076 | 62,837 | -1.9% | 62,364 | 61,974 | 0.6% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 16,076 | 19,055 | 18.5% | 17,977 | 15,648 | 14.9% |
| **Weber County** | | | | | | |
| Non-Ag. Employment (thous.) | 60.4[r] | 60.7[fo] | 0.5% | 60.3 | 59.3 | 1.8% |
| Unemployment Rate | 5.8[r] | 6.2 | 6.9% | 7.1 | 5.9 | 20.4% |
| Auth. Permit Construction (thous. of dol.) | 14,193.8 | 7,921.8 | -44.2% | 8,3[illegible]5.0 | 9,704.0 | -13.8% |
| New Dwelling Units (no.) | 109 | 57 | -47.7% | 71 | 100 | -29.5% |
| Postal Receipts (thous. of dol.) | 602.2 | 596.7 | -0.9% | 618.7 | 610.5 | 1.3% |
| Electric Customers (Residential) | 51,782 | 52,730 | 1.8% | 52,629 | 51,516 | 2.2% |
| Electric Customers (Commercial) | 4,742 | 4,866 | 2.6% | 4,815 | 4,718 | 2.1% |
| Natural Gas Customers (Residential) | 47,605 | 48,246 | 1.3% | 48,855 | 47,738 | 2.3% |
| Natural Gas Customers (Industrial) | 87 | 85 | -2.3% | 85 | 87 | -2.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,408 | 45,952 | 1.2% | 45,816 | 45,335 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,550 | 11,194 | 6.1% | 10,845 | 10,553 | 2.8% |

[r] Revised [na] Not available [fo] Forecast

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U. S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics

[2] Obtained from Utah Construction Report

[3] Includes services by nonprofit and religious institutions

[4] Includes public schools and college institutions

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| NATIONAL DATA | September 1986 | September 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,240.7 | 4,520.5 | 6.6% | 4,400.5 | 4,182.8 | 5.2% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,567.5 | 3,777.2 | 5.9% | 3,680.2 | 3,487.5 | 5.5% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 124.5 | 130.9 | 5.1% | 128.0 | 124.8 | 2.6% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 375.5 | 398.0 | 6.0% | 384.0 | 381.7 | 0.6% |
| Index of Leading Indicators (1967=100) | 179.9 | 192.7 | 7.1% | 187.8 | 176.4 | 6.5% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1967=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 330.2 | 344.4 | 4.3% | 336.6 | 327.3 | 2.8% |
| CPI-U (All Urban Consumers) Food & Beverages | 315.1 | 326.4 | 3.6% | .321.8 | 316.2 | 1.8% |
| CPI-U (All Urban Consumers) Housing | 363.7 | 375.4 | 3.2% | 367.7 | 358.4 | 2.6% |
| CPI-U (All Urban Consumers) Transportation | 302.2 | 320.4 | 6.0% | 312.0 | 315.0 | -0.9% |
| CPI-U (All Urban Consumers) Medical Care | 439.7 | 467.8 | 6.4% | 455.5 | 425.5 | 7.1% |
| CPI-U (All Urban Consumers) Energy | 360.6 | 387.4 | 7.4% | 364.4 | 390.8 | -6.8% |
| Producer Price Index (not seasonally adjusted) (1967=100) | | | | | | |
| Producer Price Index, All Finished Goods | 287.5 | 296.7 | 3.2% | 293.9 | 291.2 | 1.0% |
| GNP Price Deflator (1982=100) (qtly.) | 114.7 | 117.9 | 2.8% | 116.5 | 113.4 | 2.7% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 118.2 | 119.8 | 1.4% | 119.3 | 117.2 | 1.7% |
| Total Civilian Employment (mil.) | 109.8 | 112.7 | 2.6% | 111.6 | 109.0 | 2.4% |
| Unemployment Rate | 7.0 | 5.9 | -15.7% | 6.4 | 7.0 | -8.6% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 19,851.9 | 22,037.8 | 11.0% | 20,531.5 | 18,939.1 | 8.4% |
| Residential | 9,950.3 | 10,158.5 | 2.1% | 9,783.9 | 9,319.9 | 5.0% |
| Nonresidential | 6,876.1 | 8,047.1 | 17.0% | 6,956.9 | 6,318.9 | 10.1% |
| Non-Building | 3,025.5 | 3,832.2 | 26.7% | 3,765.8 | 3,300.2 | 14.1% |
| New Dwelling Units (no.) | 141,326 | 135,111 | -4.4% | 131,569 | 141,082 | -6.7% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 5.19 | 6.32 | 21.8% | 5.66 | 6.42 | -11.9% |
| Long Term (30-year Treasury bond yields) | 8.08 | 9.58 | 18.6% | 8.28 | 8.70 | -4.8% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 7.50 | 8.70 | 16.0% | 7.86 | 8.83 | -11.0% |
| Mortgage Rates (new homes) | 9.74 | 9.03 | -7.3% | 9.08 | 10.10 | -10.0% |

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

F.W. Dodge Report, McGraw-Hill: National Construction Data.

Survey of Current Business, U.S. Department of Commerce: New Home Mortgage Rates.

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Indexes

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# ECONOMIC IMPACT OF THE UTAH TRANSIT AUTHORITY

Boyd Fjeldsted, Garth Mangum and Jeff Waddoups*

During the 1950s and 1960s a pattern of urban sprawl spread over the metropolitan areas of the United States. The resulting suburbanization of residency and retail shopping, decentralization of manufacturing, but continued centralization of commerce required massive daily automobile ingress and egress into central business districts. The lifestyle of the urban society was perceived as deteriorating under the pressures of congestion, environmental pollution, the emergence of poverty among central city residents and a general loss of community. One national response seeking to relieve these pressures was the Urban Mass Transit Act of 1964.

Part of the national experience had been that the social responsibilities of an urban mass transit system were so substantial that it was rarely possible for an unsubsidized, private-for-profit system to offer the level of service demanded. The primary thrust of UMTA was to provide federal capital grants and later, operating grants to encourage state and local governments to initiate and expand mass transit.

## UTA History

The pressures of the national pattern were not yet seriously impacting the metropolitan area along the Wasatch Front in Utah, but it was readily apparent to the more alert, civic and political leaders that the trends were in the same direction and the emergence of similar problems only a matter of time for Utah. Minimal bus service was available in the Ogden and Provo areas. The private bus company serving the Salt Lake area was experiencing losses and threatening to withdraw. The need for a publicly subsidized urban transit system for the Wasatch Front was becoming increasingly apparent.

Beginning in 1969, the Utah State Legislature began a series of legislative actions which culminated in 1974 with sales tax for funding of the Utah Transit Authority (UTA). In addition to federal grants, public support would consist of revenues from a .25 percent sales tax levied in transit districts approved by majority votes in those municipalities, counties and combinations thereof along the Wasatch Front which chose to be served. Years of frenetic activity went into acquiring equipment and facilities, recruiting, selecting and training personnel, establishing routes, developing a maintenance system and marketing services. Bus service has been expanded from Ogden to Provo along the Wasatch Front with fingers reaching out to major employing establishments and ski resorts throughout the service area. Urban mass transit services are now available to 70 percent of the state's population. Ridership in 1986 consisted of 15.4 million linked passenger trips (a linked trip is one trip for a passenger including any transfers), and involved 11.8 million revenue miles. But all of that is not without cost, both to the users of the services and to the general public.

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## The Case for Subsidizations

Nowhere in the modern world are mass transit systems in major metropolitan areas unsubsidized, private-for-profit businesses. The reason is something economists like to call externalities. Private investors put their capital where they can expect the greatest return commensurate with risk. Business enterprises continue to produce as long as they can sell their output at a price sufficient to cover all costs and provide an adequate net revenue. Consumers purchase a good or service as long as they get more satisfaction from it than from the next most promising use of their purchasing power. The costs of production and return on capital on the one hand and the consumer satisfaction on the other are internalized in the market transactions between suppliers and producers, sellers and buyers.

However, many transactions have costs and benefits external to the market transaction. Air and water pollution from an industrial enterprise is an example of external costs. The cost of raw materials, labor and energy going into a factory are all part of the costs of production paid for by the producer and passed on to the consumer; while the costs to society of the pollution belched out of a smokestack are not. Those external costs can be avoided or reimbursed only through some exercise of public policy. An example of the flip side might be education. If it were sold for profit in a private market, students and parents could be expected to pay for that education which would bring an adequate rate of return through their employment. But who would pay for that education which makes democracy viable or sparks economic development? Those are external benefits which will be lost if not somehow publicly subsidized.

Urban mass transit is a classic case of externalities. If privately provided without public intervention in the market place, transit systems would produce as much transportation as riders would purchase at fares producing sufficient revenues to cover all costs and provide an adequate return to justify remaining in business. However, that would not pay for the use of public roads or for any possible contributions to pollution. More importantly, on the other hand, passengers would ride the buses as long as the fares did not exceed the value received in movement to work, school or recreation. But mass transit may also reduce congestion and pollution by reducing the number of private automobiles on the streets and highways. It offers mobility to those without access to private transportation, including schoolchildren, the poor, the elderly and the handicapped. It may save public investment in highways, give employers access to otherwise untapped labor pools and affect land use patterns in terms of residency and industrial and commercial location. Transit passengers have no reason to pay for those public benefits and society will be deprived of them if some source of public subsidization is not provided.

## UTA Revenues

UTA's total revenues (excluding federal capital grants of $8,297,130) for 1986 were $35,464,913. Of that total, $7,139,912 or 20.1 percent was allocated to capital reserves for the purchase of new equipment and facilities (Table 1). The other $28,325,001 covered the operating expenses for the year. Passenger revenues produced a little over $5 million or 14.5 percent of total UTA revenues, a proportion fairly representative of public mass transit systems nationally. In addition, advertising revenues, interest income and special bus revenues brought in another 5.5 percent. The remainder was public subsidy, 13.6 percent from federal operating grants and $23.5 million or 66.5 percent of total revenues emanating from the .25 percent sales tax allocated to UTA.

Table 1
UTA Revenues by Source

| | 1985 | 1986 |
|---|---|---|
| Passenger revenue | $ 5,343,880 | $ 5,147,618 |
| Special bus revenue | 341,438 | 337,414 |
| Advertising revenue | 171,613 | 190,451 |
| Sales tax revenue | 22,732,446 | 23,540,501 |
| Federal operating funds | 4,717,827 | 4,830,062 |
| Other income | 1,238,693 | 1,418,867 |
| Total | $34,545,897 | $35,464,913 |

Source: Utah Transit Authority Summary Financial Data (unaudited).

### Benefits and Costs of UTA Objectives

Throughout its various actions related to UTA, the Utah State Legislature has announced as the system's objectives:

- Reducing air pollution, congestion and highway use
- Conserving energy and natural resources
- Providing mobility to those with low incomes, handicaps or limited access to automobiles
- Contributing to the social and economic vitality of the services area

Any publicly-subsidized activity merits periodic assessment to see if the public is getting its money's worth. Ideally that assessment would take the form of a cost-benefit analysis, quantifying all costs and benefits to test whether the latter exceeds the former. That approach works well for activities of simple cost and straightforward and easily measured benefit. No one has yet done a successful cost-benefit analysis of any urban public transit system anywhere in the world. Most of the costs are readily identifiable and quantifiable. The benefits are more complex and many of them resist quantification. What can be done is to identify benefits, quantify as many of them as possible, compare those to the costs and then judge qualitatively whether the nonquantified benefits are likely to offset the remaining costs.

At the urging of the Utah Transit Authority, the Bureau of Business and Economic Research at the University of Utah undertook in the summer and fall of 1987, a study of the UTA system's impact on the Utah economy. This article is a summary of a 95-page report with the same title. The operational questions are:

1. To what extent has UTA accomplished its assigned objectives?
2. Has the economic impact of the system been adequate to justify its costs?
3. What does the future portend for mass transit needs in Utah?

### User Benefits

The most obvious beneficiaries of UTA's transit services are the bus riders. It is obvious that they would not ride the bus if the benefits they received were not at least equal to the fares they pay. However, it is possible and even likely that for many of them their benefits exceed their costs. During the period for which data were available to this study, the basic fare was 50 cents for peak hours and 40 cents off-peak. Handicapped and senior citizens were charged half-fare. On a monthly pass basis, adult riders paid $18 and minor students, $13. Monthly passes for senior citizens and handicapped cost $13. From this varied structure the average fare cost per ride amounted to 33 cents during 1986.

One straightforward measure of the benefits UTA riders receive is to compare the $5 million spent in fares during 1986 with the cost of making the same trips by other available methods of transportation. In the absence of UTA, those now riding the bus would have to use automobiles, bicycles, walk or stay home. Assuming the former, it is possible to estimate the amount of money saved by bus riders over what automobile ownership and use would have cost.

The Hertz Corporation estimates the cost of automobile ownership at 52 cents per mile. Of course, few Utahns would forego automobile ownership in order to ride the bus. A Stanford Research Institute study in Los Angeles estimated that 10 percent of those riding the buses had chosen not to own an automobile because bus transportation was available. No similar information is available for

Utahns so the SRI study's 10 percent is assumed for illustration. For those who own an automobile, such costs as depreciation, interest, insurance and licensing go on regardless of use. The 21 cents per mile the Internal Revenue Service allows employees to be reimbursed for use of their personal automobile is a reasonable estimate of the cost of driving an automobile, once owned. The average UTA linked passenger trip in 1986 would have required 5.8 miles of automobile travel. Since the average personal vehicle traveling Wasatch Front roads and highways contains 1.54 persons, 58 million personal vehicle miles would have been required to carry the 1986 UTA ridership. If 10 percent of those personal vehicle miles saved 52 cents per mile and the remainder 21 cents per mile, the total savings to users from having the UTA available in 1986 was $13,978,000. Subtracting the $5,177,736 they paid in fares, their net savings was $8,800,264.

Neither of these calculations counts the benefits of reduced driving stress, on-bus leisure and increased safety. But neither are the costs of the walk to and from the bus stops nor the time expenditure of the additional 10 minutes required for the average bus ride counted, compared to an automobile ride of the same distance.

### Community Benefits

The fact that local taxpayers pay 66.5 percent of the cost of each bus user's ride points up the importance of assessing the community benefits of the UTA system. Involved is a substantial redistribution of income from taxpayers to transit users. Such redistribution is justified only if there is some special public policy purpose for the income transfer or if the taxpayers get their money's worth in other social benefits. Among the arguments for UTA's initiation were the potentials for greater safety, reduced pollution, congestion, energy absorption, more efficient land use, improved economic development and employment and fairer income distribution. The progress toward each of these objectives to date and their demonstrated future potential can be assessed as a basis for an estimate of the degree to which community benefits exceed community costs.

#### Safety

Those riding UTA buses experience less risk exposure to automobile accidents than if they traveled the same miles by private automobile. In the UTA service area in 1986, there were 2.1 fatalities, 145 injuries and 1,133 reported property damage accidents for every one hundred million miles traveled. Since UTA reduced private vehicle travel by an estimated 58 million miles, the incidence of accidents was reduced by the numbers indicated in Table 2. The United States Department of Transportation publishes the estimates of the average cost of each automobile accident shown in Table 2. Multiplying the accidents prevented by the average costs per occurrence results in an estimated safety savings of $2,775,863.

Unfortunately, UTA buses are involved in traffic accidents as well (Table 3). In addition, the bus company keeps track of other injury-causing

Table 2
Indirect Safety Effects of UTA

| Accident Type | Number, UTA Service Area | Rate[a] | Cost per Occurrence | Number Saved | Cost Saving |
|---|---|---|---|---|---|
| Fatality | 161 | 2.1 | $503,757 | 1.25 | $ 736,051 |
| Injury | 11,141 | 145.3 | 18,323 | 84.31 | 1,544,629 |
| Property | 86,920 | 1,133.8 | 753 | 657.16 | 495,173 |
| Total | | | | | $2,775,853 |

[a] Per hundred million vehicle miles traveled

Table 3
UTA Accident Rates
(average per year)

| Accident Type | Number | Rate[a] | Cost per Occurrence | Total Cost |
|---|---|---|---|---|
| Property damage | 173 | 1456.43 | $ 753 | $130,269 |
| PIP[b] | 147 | 1237.55 | 190 | 27,966 |
| Bodily injury | 29 | 244.14 | 18,323 | 531,367 |
| Fatality | 0.33 | 2.78 | 503,757 | 166,240 |

[a] Per hundred million vehicle miles traveled
[b] Personal injury to passengers, pedestrians and bicyclists

accidents not involving automobiles. On the same basis, the costs of those accidents would be $855,841, leaving a net savings of $1,920,012 per year (Table 4).

Table 4
Net UTA Road Safety Savings, 1986

| | |
|---|---|
| Savings due to reduced vmt's | $2,775,853 |
| Total UTA accident cost | 855,841 |
| Net savings | 1,920,012 |

### Energy Conservation

Energy conservation is also a consequence of the reduced vehicle miles traveled as a result of UTA ridership; though, of course, there must be an offset for the fuel use of UTA buses. The 58 million personal vehicle miles estimated to be saved during 1986 by UTA's availability translates into 3.8 million gallons of gasoline. However, UTA traveled 11.3 million miles providing that service, consuming 2.9 million gallons of cheaper priced fuel for a net fuel saving of approximately 900,000 gallons. That consists of about .1 percent of Utah's total motor fuel consumption. Combining the savings from reduced fuel consumption and the replacement by cheaper diesel fuels at 1986 prices resulted in an estimated total fuel cost savings of $865,240. Fuel savings is not as critical to society as it was during the oil shortage era of UTA's birth but that importance may return in the foreseeable future.

### Congestion

Congestion reduction is also a consequence of reduced private vehicle miles traveled. Congestion takes its toll in frustration and stress but the most quantifiable cost is delay resulting in time loss, excess fuel use and waste of the overhead of automobile ownership. Of course, buses themselves contribute to congestion, but each bus mile, at present levels of ridership, replaces an average of 11.7 automobile miles. Therefore, because of UTA, approximately 36,000 fewer private vehicle trips were made along the Wasatch Front streets and highways on a daily basis during 1986. Though at most hours the road capacity is sufficient to carry the load, rush hours are more critical.

The Wasatch Front Regional Council estimates that if all of the peak hour commuters now riding UTA buses were commuting by automobile, the increased congestion would slow traffic to the extent that a total of approximately 1,800 hours would be added to commuting time each day on average. The Federal Urban Mass Transit Authority evaluates time saved in commuting to work at $4 per hour on a national basis. If that evaluation is accepted for Utah commuters, they gain a total of $2,628,000 worth of time each year because of UTA availability. That figure will become even more compelling as the years go by; the commuting hours saved by the year

2005, for instance, are estimated at 7,600 hours per day. Reduced congestion has other benefits such as pedestrian convenience and safety and savings in street and highway maintenance, which are less easily quantified. However, system-wide, outside rush hours, the total effect is little noticed.

### Economic Impact of Federal Grants

Subsidies from the Urban Mass Transit Administration to the Utah Transit Authority have an impact on the Utah economy that goes beyond the direct wages and salaries paid for out of the grant funds. The overall magnitude of this impact has been analyzed by means of the 120-sector Bureau of Economic and Business Research Input-Output Model of the Utah economy. This model can be used to estimate the indirect and induced impacts of an external stimulus to the Utah economy, such as injection of UMTA grant funds.

Indirect impacts refer to impacts resulting from the purchases of equipment, supplies, materials or services from Utah sources out of grant funds, while induced impacts refer to impacts resulting from direct payments to households out of grant funds or from income generated indirectly out of payments to procure goods and services from Utah vendors.

There are two basic assumptions underlying the analysis of the impact of UMTA grants to the Utah Transit Authority: (1) if the UMTA grants should be withdrawn, they would not be replaced by other federal grants to some other Utah agency (for example, grants to the Utah Department of Transportation for highway construction); and (2) that the allocation of local resources among alternative in-state and out-of-state industrial sectors would not be affected by the withdrawal of federal subsidies to the Utah Transit Authority.

Obviously, other scenarios are conceivable. One might want to consider what the impact would be if UMTA grants were replaced by some other sort of federal subsidies, or what the impact would be if withdrawal of UMTA subsidies were to result in a reallocation of Utah expenditures in such a way as to make an appropriate adjustment to the withdrawal of federal funding. Nevertheless, it should still be instructive to consider the impact of the federal funds under the restricted assumptions that have been specified.

Only that proportion of the federal funds ultimately ending up as income for Utah households and not spent for purchases of materials and services from out-of-state adds to Utah income. That proportion is different for each of the 120 sectors of the Input-Output Model.

The $4,764,170 Federal Operating Assistance and the $8,297,130 Federal Capital Grant received in 1986 were dispersed among the 120 sectors in accordance with the expenditure patterns of that year. It became apparent that approximately $3.5 million of the total was direct income to Utah households which, with an income multiplier of 2.4, had a total impact of more than $8.5 million per year.

## Unquantifiable Benefits

To this point, the user and community benefits identified are those which, under reasonable assumptions, can be valued in monetary terms. There are, in addition, a number of benefits which have undoubted value but do not easily lend themselves to quantitative valuation.

### Air Pollution

Diminished air pollution is another contribution of UTA's reduction in personal vehicle miles traveled, but one against which must be offset UTA's own pollution impact. The pollutants involved are hydrocarbons, carbon monoxide and nitrous oxide. Buses are such heavy contributors to the emission of hydrocarbons and nitrous oxide that the total pollution of these types are increased by UTA's presence. For carbon monoxide, the most toxic of the three pollutants, the savings from reduced total personal vehicle miles are greater than the bus emissions. Table 5 shows the net result.

UTA's effect is positive, though of small moment, in the total of Wasatch Front particulate emissions. However, the impact would be much more significant in an area of concentrated vehicle and bus traffic such as the central business district. Since the consequences of air pollution are primarily health and aesthetics, it is difficult to put a dollar value on the net savings.

Table 5
Pollution Effect of UTA
(tons)

| Emission Type | Total in Area | Amount Saved by UTA | Percent Change |
|---|---|---|---|
| Carbon monoxide | 45,154 | 165.14 | -.366 |
| Nitrous oxide | 29,969 | -135.28 | .005 |
| Hydrocarbons | 7,348 | -231.00 | .03 |

Source: Calculated using statistics from Utah Bureau of Air Quality, 1985 Utah Air Emission Inventory, Department of Health, Salt Lake City, Utah, 1985.

### Land Use

The presence of a mass transit system undoubtedly has a major effect on patterns of land use and spatial development along the Wasatch Front. The trouble is with UTA exercising influence in various ways, no one can say what the net effect is. Supporters in the central business district hoped a subsidized public transportation system would help facilitate a centralized focus for industries, offices and stores and their customers and employees. Congestion, it was feared, could only become more intense, adding to time delays and frustration until all of the above decentralized to the suburbs. Since that decentralization had been the pattern for three decades, it was hoped that an urban mass transit system would bring customers and employees to and from downtown expeditiously, comfortably and cheaply, encouraging businesses and the tax base they represented to stay in or return to the central city.

There are currently an estimated 3 million person trips along the Wasatch Front each day. At the population total projected for the Wasatch Front in the year 2010, that figure will become 4.5 million. Work trips are projected to increase from the current 614,000 per day to 930,000 in 2010 A.D. With rush hour traffic so often at a near standstill, the current ingress and egress routes would have to be at least duplicated, a mind-boggling land use problem as well as financial challenge in itself. Clearly, the Wasatch Front's choices are: (1) a duplication of the freeways, (2) a vast expansion of mass transit, or (3) an acceleration of decentralization.

However, just as mass transit can move customers and employees from the suburbs to downtown, it can transport them from their residences to suburban shopping malls and places of employment. The suburbanization of retail trade has been going on for many years, resisting all efforts to increase the attractiveness of downtown shopping. Similarly, manufacturing has responded to centrifugal forces. Now, despite substantial central city vacancy rates, office complexes are sprouting throughout the valley. Suburban businesses and property owners make the same demands for mass transit service as do their central business district counterparts. The net impact of mass transit on these trends is impossible to measure. However, it is clear that viable central business districts for the major cities along the Wasatch Front and especially in Salt Lake City depend upon continued expansion in mass transit availability and use.

Most Wasatch Front communities emerged and took essential shape before the advent of mass transit and are not well-patterned from that vantage-point. That cannot be changed. But UTA's participation with the Wasatch Front Regional Council in planning for the area's future promises more rational land use as communities develop and change.

### Economic Development and Employment

One of the characteristics always looked for among the infrastructure criteria assessed by businesses seeking locations is an efficient mass transit system. New employers want assurance that an eager workforce will be able to move expeditiously and cheaply from their residences to the new places of employment. Existing employers are constantly on the lookout for new labor pools to tap to restrain wage increases and assure plentiful applicants. With the presumption that the lower the family income, the less likely the availability of private transportation, mass transit should increase availability of lower cost labor for employers. In the process low income groups are provided greater opportunity, but better rewarded employees face increased competition.

Consumer service businesses are also more likely to expand and prosper if customers can get to their doors conveniently and at low cost. However, despite all of these reasonable expectations, there is no way to prove that it has happened and, therefore, no way to project those impacts into the future. All that can be said for certain is that, without mass transit, there are imminent growth restraints on activities of limited access such as the ski resorts of Big and Little Cottonwood Canyons and the central business district of at least Salt Lake City.

### Equity, Mobility and Income Distribution

An objective established for UTA from its beginning has been the provision of transportation services to the aged, the handicapped, those of low income and others without adequate access to alternative forms of transportation. It was assumed that a redistribution of incomes from the richer to the poorer would be involved. The special fares and passes for senior citizens and handicapped, and the soon-to-be inaugurated Flextran Service for the seriously handicapped are indicators of progress toward the mobility objective. Redistribution is not so clear.

There is no question but what the average household income of UTA riders is below that of the average Wasatch Front household. Whereas the median household income along the Wasatch Front was $30,850 in 1986, 55 percent of UTA riders in 1986 were from households having earned incomes of less than $15,000 (Table 6). However, the sales tax which produces 66.5 percent of UTA revenues also has regressive incidence, with those households having incomes below $15,000 on the average paying .40 percent of their income to support UTA, compared to .19 percent for the $15,000-$25,000 group and .12 percent of households with incomes between $23,000 and $50,000. The incidence rises again for the open-ended over-$50,000 income class who pay .17 percent of their incomes to the UTA sales tax (Table 7). On an aggregate basis, those with incomes above $25,000 produced 51 percent of the UTA sales tax income in 1986. The households with incomes above $50,000 (5%) paid 20 percent of the total tax, while the households with incomes below $15,000 (29%) paid 29 percent. Those with incomes between $15,000 and $25,000 (34%) came off best in this sense, providing 20 percent of the UTA sales tax revenues. The households with

Table 6
Income Distribution of UTA Area and UTA Riders
(1985)

| Household Income Class (000) | Number of UTA Riders | Percent of UTA Riders in Income Class | UTA Area Population | Percent of UTA Area Population in Income Class | Riders as Percent of Population Class |
|---|---|---|---|---|---|
| Under $15 | 17,572 | 55 | 369,909 | 29 | 4.8 |
| $15-25 | 5,973 | 19 | 403,120 | 32 | 1.5 |
| $25-50 | 6,790 | 21 | 404,616 | 32 | 1.7 |
| Over $50 | 1,365 | 4 | 71,437 | 6 | 1.9 |

Source: Ridership data from Wasatch Front Regional Council, "Analysis of 1985 Onboard Survey, 1986." UTA area population data projected on the basis of 1980 Census of Population data.

Table 7
Distribution of UTA Sales Tax Burden
(1986)

| Income Class (000) | Total Income of Class | Total Sales Tax Paid | UTA Sales Tax as Percent of Total Income of Class |
|---|---|---|---|
| Under $15 | $1,608,205,754 | $147,465,365 | .40 |
| $15-$25 | 2,329,895,820 | 102,857,858 | .19 |
| $25-$50 | 5,673,912,070 | 158,400,080 | .12 |
| Over $50 | 2,665,489,268 | 102,244,697 | .17 |

Source: Calculated using figures from the "Tax Burden Report," Bryant Howe, Office of Legislative Research, 1987.

incomes between $25,000 and $50,000 (32%) paid 31 percent of the total. The modest redistribution in favor of those with lower incomes is in marked contrast to the San Francisco Bay Area where the transit system, BART, clearly involves a subsidy to higher income households at the expense of those with low incomes.

### What Does It All Add Up to?

Transit users spent about $5.2 million per year in bus fares during 1986, along with some extra commuting time, to benefit to the extent of $14 million in automobile cost savings. Clearly, UTA has been a boon to its users. But why is the usage not heavier? The time loss and the decreased autonomy of the private automobile driver are apparently worth even more to the rest.

However, taxpayers, most of whom never set foot or posterior on a bus, pay out $23.5 million per year in sales taxes (1986) to subsidize those who do. Since the sales tax is a generally regressive tax, the burden falls on those least able to pay. Nevertheless, the fact that bus riders also tend to be drawn from the lower end of the income scale prevents a major redistribution from the poor to the rich through the sales tax subsidy. The net result is apparently to leave the existing income distribution little disturbed. However, the taxpayers represent the community at large and raise the question, "What public benefits justify this $23.5 million annual public expenditure?"

If the estimates of this study are correct, the community receives back a savings in accident costs of about $1.9 million per year. Some $865,000 per year is saved in fuel costs which would otherwise have been paid for largely by the same people who now ride the buses. That savings would be a significant community benefit only if gasoline were in short supply. There is a small net reduction in air pollution but no means for quantifying those benefits. Automobile commuters gained $2.6 million in time saved by the reduced congestion.

The quantifiable community benefits are:

| | |
|---|---|
| Safety | $ 1,920,012 |
| Energy Conservation | 865,240 |
| Commuter Time Saving | 2,628,008 |
| Federal Grant Impact | 8,500,000 |
| Total | $13,913,252 |

The total community benefit figure offsets 59.2 percent of the $23.5 million sales tax subsidy to UTA riders. In addition, non-quantifiable benefits are evident in the reduction of congestion, promotion of economic development, redistribution of income and the mobility of the economically disadvantaged and those without automobile access. There has been little net impact on land use to date but that will increase in the future with unpredictable results. Other positive impacts on economic development and employment appear reasonable but unprovable. All that is clear for congestion, land use and economic development is that the central business district of at least Salt Lake City and some of the area ski resorts cannot maintain themselves, let alone expand over time, without increased reliance on mass transit.

Quantifiable community benefits offset three-fifths of the community cost. It is a political judgment that the surplus gains to the riders plus the non-quantifiable benefits are at least equal to the remaining costs. Since the transit system is in place with its initial cost already paid, both user and community benefits can only rise as ridership increases. The most important order of business for urban mass transit in Utah appears to be finding ways to increase utilization. UTA has been aggressive in that pursuit throughout its short history but has yet to find the magic formula.

# Utah Business Statistics

| UTAH DATA | Oct. 1986 | Oct. 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,342 | NA | NA | NA | 18,206.7 | NA |
| New Corporations (no.) | 434 | 474 | 9.2% | 459 | 470 | -2.3% |
| New Car, Truck and Motorhome Sales (no.) | 5,478 | NA | NA | NA | 6,268.8 | -19.1% |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 56.00 | 63.80 | 13.9% | 62.58 | 55.19 | 13.4% |
| Lambs (cwt) | 63.80 | 69.50 | 8.9% | 72.41 | 64.23 | 12.7% |
| Milk Wholesale (cwt) | 12.60 | 12.10 | -4.0% | 12.03 | 11.74 | 2.4% |
| Alfalfa Hay, Baled (per ton) | 61.00 | 69.00 | 13.1% | 66.33 | 69.39 | -4.4% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 40,104 | 43,449 | 8.3% | 41,052 | 36,272 | 13.2% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 144,475 | 148,262 | 2.6% | 123,255 | 126,453 | -2.5% |
| Residential | 67,764 | 49,503 | -26.9% | 55,030 | 58,365 | -5.7% |
| Nonresidential | 64,230 | 66,950 | 4.2% | 37,554 | 48,585 | -22.7% |
| Public Works and Utilities | 12,481 | 31,809 | 154.9% | 30,671 | 19,753 | 55.3% |
| Total Permit Construction (thous. of dol.) [2] | 99,717.7 | 93,013.6 | -6.7% | 93,391.4 | 111,364.9 | -16.1% |
| Residential | 63,123.3 | 37,293.5 | -40.9% | 43,607.5 | 59,216.7 | -26.4% |
| Nonresidential | 25,424.6 | 41,856.2 | 64.6% | 36,020.6 | 38,309.2 | -6.0% |
| Additions, Alterations and Repairs | 11,169.9 | 13,863.9 | 24.1% | 13,763.3 | 13,859.6 | -0.7% |
| New Dwelling Units (no.) | 903 | 495 | -45.2% | 670 | 1,120 | -40.2% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 762.6 | 755.4 | -0.9% | 758.3 | 751.1 | 1.0% |
| Total Employed Persons | 721.2 | 716.0 | -0.7% | 709.8 | 707.9 | 0.3% |
| Unemployed Persons | 41.4 | 39.3 | -5.1% | 48.5 | 42.8 | 13.3% |
| Percent Total Labor Force | 5.4 | 5.2 | -3.7% | 6.4 | 5.7 | 12.8% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 640.1 | 647.4 | 1.1% | 640.4 | 634.7 | 0.9% |
| Manufacturing | 91.3 | 94.3 | 3.3% | 92.2 | 92.5 | -0.4% |
| Mining | 7.6 | 8.3 | 9.2% | 8.2 | 8.1 | 0.1% |
| Contract Construction | 33.0 | 27.5 | -16.7% | 28.5 | 33.8 | -15.8% |
| Transportaion, Communication and Utilities | 37.4 | 38.4 | 2.7% | 37.7 | 37.2 | 1.4% |
| Wholesale Trade | 36.2 | 36.2 | 0.0% | 36.3 | 35.9 | 1.2% |
| Retail Trade | 117.8 | 118.7 | 0.8% | 119.1 | 116.3 | 2.4% |
| Finance, Insurance and Real Estate | 33.1 | 33.6 | 1.5% | 33.7 | 32.7 | 3.1% |
| Services [3] | 141.3 | 148.5 | 5.1% | 143.1 | 137.2 | 4.3% |
| Federal Government | 39.9 | 39.0 | -2.3% | 40.0 | 40.4 | -1.0% |
| State Government [4] | 37.8 | 37.3 | -1.3% | 37.3 | 37.7 | -1.0% |
| Local Government [4] | 64.4 | 65.6 | 1.9% | 64.4 | 63.0 | 2.3% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 40.2 | 39.8 | -1.0% | 39.7 | 40.4 | -1.8% |
| Mining | 41.2 | 39.9 | -3.2% | 42.0 | 43.0 | -2.5% |
| Wholesale Trade | 36.8 | 38.9 | 5.7% | 38.4 | 36.3 | 5.8% |
| Retail Trade | 27.8 | 27.8 | 0.0% | 28.4 | 28.0 | 1.4% |
| Amount of Unemployment Compensation (thous. of dol.) | 6,560.3 | 4,809.0 | -26.7% | 8,535.7 | 8,015.2 | 6.5% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,417.4 | 2,474.8 | 2.4% | 2,447.3 | 2,352.1 | 4.0% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 65,100.6 | 85,901.9 | 32.0% | 135,624.4 | 124,355.4 | 9.1% |
| Sales and Use Tax | 12,928.3 | 19,065.1 | 47.5% | 47,469.6 | 45,247.1 | 4.9% |
| Motor Fuel Tax | 9,254.8 | 12,471.1 | 34.8% | 8,801.3 | 7,675.1 | 14.7% |
| Individual Income Tax | 23,634.1 | 26,109.5 | 10.5% | 47,120.1 | 38,475.2 | 22.5% |
| Corporation Franchise Tax | 4,627.8 | 9,687.8 | 109.3% | 6,247.4 | 5,012.3 | 24.6% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,024.1 | NA | NA | NA | 1,104.1 | NA |
| Crude Oil to Refineries (thous. of bbls.) | 4,286.8 | 3,735.5 | -12.9% | 3,823.1 | 3,721.6 | 2.7% |
| Crude Oil (thous. of bbls.) | 3,136.9 | 3,047.2 | -2.9% | 2,999.9 | 3,319.4 | -9.6% |
| Natural Gas (mil. of cu. ft.) | 20,313.0 | 25,011.8 | 23.1% | 21,315.0 | 19,180.8 | 11.1% |
| Coal (thous. short tons) | 840.0 | 1,713.0 | 103.9% | 1,130.6 | 1,009.3 | 12.0% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 766,624 | 767,093 | 0.1% | 842,657 | 819,351 | 2.8% |
| Highway Traffic Count Across State Lines | 37,187 | 37,185 | -0.0% | 38,071 | 36,276 | 4.9% |
| Transient Room Taxes (thous. of dol.) | 207.9 | 248.3 | 19.4% | 457.7 | 425.5 | 7.6% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 797.2 | 890.7 | 11.7% | 1,057.5 | 1,013.0 | 4.4% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 477,003 | 483,603 | 1.4% | 478,752 | 470,756 | 1.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 170,836 | 177,961 | 4.2% | 174,760 | 167,789 | 4.2% |
| Electric Customers (Residential) | 464,446 | 473,304 | 1.9% | 471,796 | NA | NA |
| Electric Customers (Commercial) | 45,274 | 45,937 | 1.5% | 46,129 | NA | NA |
| Natural Gas Customers (Residential & Commercial) | 434,658 | 443,530 | 2.0% | 445,068 | 433,577 | 2.7% |
| Natural Gas Customers (Industrial) | 572 | 553 | -3.3% | 557 | 568 | -2.0% |

# Utah Business Statistics

| UTAH DATA | Oct. 1986 | Oct. 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Davis County | | | | | | |
| Non-Ag. Employment (thous.) | 53.4r | 53.0fo | -0.7% | 53.3 | 53.4 | -0.3% |
| Unemployment Rate | 4.5r | 4.5 | 0.0% | 5.3 | 4.3 | 23.3% |
| Auth. Permit Construction (thous. of dol.) | 14,193.9 | 7,806 | -45.0% | 12,767 | 15,783 | -19.0% |
| New Dwelling Units (no.) | 137 | 79 | -42.3% | 97 | [illegible] | [illegible] |
| Postal Receipts (thous. of dol.) | 367.3 | 335 | -8.7% | NA | [illegible] | NA |
| Electric Customers (Residential) | 45,874 | 47,69 | 4.0% | 47,041 | 43,001 | 9.4% |
| Electric Customers (Commercial) | 3,187 | 3,304 | 3.7% | 3,266 | 3,048 | 7.1% |
| Natural Gas Customers (Residential) | 46,538 | 48,645 | 4.5% | 48,537 | 45,941 | 5.6% |
| Natural Gas Customers (Industrial) | 51 | 52 | 2.0% | 52 | 52 | [illegible] |
| Telephone Lines in Service (Mt. Bell)(Residential) | 53,799 | 54,468 | 1.2% | 54,708 | 52,290 | 4.6% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,350 | 10,681 | 3.2% | 10,467 | 10,041 | 4.2% |
| Salt Lake County | | | | | | |
| Non-Ag. Employment (thous.) | 333.5r | 333.5fo | 0.0% | 334.9 | 329.3 | 1.7% |
| Unemployment Rate | 4.9r | 4.7 | -4.1% | 5.5 | 5.9 | -6.8% |
| Auth. Permit Construction (thous. of dol.) | 48,614.3 | 45,160.8 | -7.1% | 44,471.1 | 60,713.1 | -26.8% |
| New Dwelling Units (no.) | 400 | 185 | -53.8% | 266 | 576 | -53.8% |
| Postal Receipts (thous. of dol.) | 7,432.2 | 6,957 | -6.4% | 7,180 | 7,275 | -1.3% |
| Electric Customers (Residential) | 232,440 | 237,181 | 2.0% | 235,770 | 230,400 | 2.3% |
| Electric Customers (Commercial) | 19,411 | 20,027 | 3.2% | 19,834 | 19,204 | 3.3% |
| Natural Gas Customers (Residential) | 211,800 | 214,561 | 1.3% | 216,835 | 211,423 | 2.6% |
| Natural Gas Customers (Industrial) | 254 | 235 | -7.5% | 243 | 257 | -5.4% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 224,537 | 228,297 | 1.7% | 226,220 | 221,375 | 2.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 108,525 | 110,594 | 1.9% | 109,679 | 107,552 | 2.0% |
| Utah County | | | | | | |
| Non-Ag. Employment (thous.) | 74.5r | 74.5fo | 0.0% | 72.2 | 72.1 | 0.1% |
| Unemployment Rate | 6.0r | 5.1 | -15.0% | 7.3 | 6.3 | 15.9% |
| Auth. Permit Construction (thous. of dol.) | 9,003.5 | 14,046.7 | 56.0% | 12,573.1 | 9,323.4 | 34.9% |
| New Dwelling Units (no.) | 116 | 78 | -32.8% | 93 | [illegible] | [illegible] |
| Postal Receipts (thous. of dol.) | 923.0 | 948 | 2.7% | 932 | 913 | [illegible] |
| Electric Customers (Residential) | 49,983 | 51,470 | 3.0% | 51,829 | NA | NA |
| Electric Customers (Commercial) | 6,175 | 5,856 | -5.2% | 5,338 | NA | NA |
| Natural Gas Customers (Residential) | 59,730 | 59,952 | 0.4% | 60,192 | 59,461 | 1.2% |
| Natural Gas Customers (Industrial) | 72 | 69 | -4.2% | 71 | 71 | [illegible] |
| Telephone Lines in Service (Mt. Bell)(Residential) | 64,439 | 64,122 | -0.5% | 62,338 | 62,124 | 0.3% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 16,209 | 19,347 | 19.4% | 18,233 | 15,741 | 15.8% |
| Weber County | | | | | | |
| Non-Ag. Employment (thous.) | 59.9r | 60.4fo | 0.8% | 60.4 | 59.4 | [illegible] |
| Unemployment Rate | 5.9r | 6.1 | 3.4% | 7.1 | [illegible] | [illegible] |
| Auth. Permit Construction (thous. of dol.) | 8,781.7 | 9,923.4 | 13.0% | 8,460.1 | 9,068.1 | -6.7% |
| New Dwelling Units (no.) | 72 | 55 | -23.6% | 69 | 80 | -13.8% |
| Postal Receipts (thous. of dol.) | 600.7 | 563.1 | -6.3% | 615.5 | [illegible] | [illegible] |
| Electric Customers (Residential) | 52,000 | 52,885 | 1.7% | 52,702 | 51,629 | 2.1% |
| Electric Customers (Commercial) | 4,731 | 4,906 | 3.7% | 4,830 | 4,727 | 2.2% |
| Natural Gas Customers (Residential) | 47,974 | 48,590 | 1.3% | 48,907 | [illegible] | [illegible] |
| Natural Gas Customers (Industrial) | 87 | 86 | -1.1% | 85 | 87 | -2.3% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,541 | 46,098 | 1.2% | 45,862 | 45,368 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,624 | 11,300 | 6.4% | 10,902 | 10,563 | 3.2% |

r Revised  na Not available  fo Forecast

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U. S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics
[2] Obtained from Utah Construction Report
[3] Includes servic[illegible], nonprofit and religious institutions
[4] Includes public schools and college institutions

# Utah Business Statistics

| UTAH DATA | Nov. 1986 | Nov. 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,342 | NA | NA | NA | 18,247.3 | NA |
| New Corporations (no.) | 338 | 397 | 17.5% | 464 | 463 | 0.3% |
| New Car, Truck and Motorhome Sales (no.) | 5,037 | NA | NA | NA | 6,204.8 | -19.1% |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 58.00 | 64.00 | 10.3% | 63.08 | 55.06 | 14.6% |
| Lambs (cwt) | 68.30 | 68.80 | 0.7% | 72.45 | 65.03 | 11.4% |
| Milk Wholesale (cwt) | 12.80 | 12.20 | -4.7% | 11.98 | 11.80 | 1.5% |
| Alfalfa Hay, Baled (per ton) | 65.00 | 70.00 | 7.7% | 66.75 | 69.06 | -3.3% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 35,171 | 39,962 | 13.6% | 41,451 | 36,384 | 13.9% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 103,660 | 74,668 | -28.0% | 120,839 | 127,483 | -5.2% |
| Residential | 58,637 | 40,507 | -30.9% | 53,519 | 59,668 | -10.3% |
| Nonresidential | 29,479 | 22,441 | -23.9% | 36,967 | 47,275 | -21.8% |
| Public Works and Utilities | 15,544 | 11,720 | -24.6% | 30,353 | 20,790 | 46.0% |
| Total Permit Construction (thous. of dol.) [2] | 73,615.3 | 90,238.9 | 22.6% | 94,776.7 | 109,205.9 | -13.2% |
| Residential | 39,579.6 | 29,109.2 | -26.5% | 42,735.0 | 58,937.9 | -27.5% |
| Nonresidential | 23,461.8 | 48,999.1 | 108.8% | 38,148.7 | 36,641.8 | 4.1% |
| Additions, Alterations and Repairs | 10,573.8 | 12,130.6 | 14.7% | 13,893.0 | 13,646.7 | 1.8% |
| New Dwelling Units (no.) | 762 | 413 | -45.8% | 641 | 1,113 | -42.4% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 757.3 | 761.0 | 0.5% | 758.6 | 748.6 | 1.3% |
| Total Employed Persons | 714.4 | 719.2 | 0.7% | 710.2 | 705.8 | 0.6% |
| Unemployed Persons | 42.8 | 41.9 | -2.1% | 48.5 | 42.4 | 14.4% |
| Percent Total Labor Force | 5.7 | 5.5 | -3.5% | 6.4 | 5.7 | 13.1% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 643.6 | 650.1 | 1.0% | 641.0 | 635.3 | 0.9% |
| Manufacturing | 91.1 | 94.6 | 3.8% | 92.5 | 92.2 | 0.4% |
| Mining | 7.8 | 8.4 | 7.7% | 8.2 | 8.0 | 2.0% |
| Contract Construction | 31.5 | 26.4 | -16.2% | 28.0 | 33.3 | -15.7% |
| Transportaion, Communication and Utilities | 37.7 | 38.6 | 2.4% | 37.8 | 37.3 | 1.3% |
| Wholesale Trade | 36.1 | 35.9 | -0.6% | 36.3 | 35.9 | 1.1% |
| Retail Trade | 121.1 | 120.8 | -0.2% | 119.1 | 116.6 | 2.1% |
| Finance, Insurance and Real Estate | 33.1 | 33.7 | 1.8% | 33.7 | 32.8 | 2.8% |
| Services [3] | 141.1 | 148.5 | 5.2% | 143.7 | 137.9 | 4.2% |
| Federal Government | 39.7 | 39.3 | -1.0% | 39.9 | 40.4 | -1.1% |
| State Government [4] | 39.0 | 38.3 | -1.8% | 37.3 | 37.9 | -1.6% |
| Local Government [4] | 64.9 | 65.7 | 1.2% | 64.5 | 63.0 | 2.4% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 40.4 | 41.5 | 2.7% | 39.8 | 40.4 | -1.4% |
| Mining | 43.3 | 40.8 | -5.8% | 41.7 | 42.9 | -2.6% |
| Wholesale Trade | 35.8 | 38.4 | 7.3% | 38.6 | 36.4 | 6.3% |
| Retail Trade | 28.3 | 27.7 | -2.1% | 28.4 | 28.0 | 1.2% |
| Amount of Unemployment Compensation (thous. of dol.) | 9,295.2 | 4,697.0 | -49.5% | 8,152.5 | 8,326.0 | -2.1% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,409.9 | 2,475.9 | 2.7% | 2,452.8 | 2,386.5 | 2.8% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 241,246.5 | 272,882.3 | 13.1% | 138,260.7 | 124,448.2 | 11.1% |
| Sales and Use Tax | 129,345.4 | 131,810.9 | 1.9% | 47,674.3 | 45,960.7 | 3.7% |
| Motor Fuel Tax | 4,332.6 | 9,748.5 | 125.0% | 9,252.7 | 7,721.6 | 19.8% |
| Individual Income Tax | 64,537.4 | 81,297.9 | 26.0% | 48,516.9 | 38,641.3 | 25.6% |
| Corporation Franchise Tax | 511.2 | 835.4 | 63.4% | 6,274.4 | 4,799.8 | 30.7% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,081.3 | NA | NA | NA | 1,098.3 | NA |
| Crude Oil to Refineries (thous. of bbls.) | 4,145.4 | 3,952.5 | -4.7% | 3,807.0 | 3,765.8 | 1.1% |
| Crude Oil (thous. of bbls.) | 3,169.1 | 2,859.7 | -9.8% | 2,974.1 | 3,292.9 | -9.7% |
| Natural Gas (mil. of cu. ft.) | 21,683.2 | 24,208.9 | 11.6% | 21,525.5 | 19,340.7 | 11.3% |
| Coal (thous. short tons) | 783.0 | 1,513.0 | 93.2% | 1,191.4 | 982.6 | 21.3% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 709,324 | 723,509 | 2.0% | 843,839 | 827,957 | 1.9% |
| Highway Traffic Count Across State Lines | 32,191 | NA | NA | NA | 36,674 | NA |
| Transient Room Taxes (thous. of dol.) | 1,109.7 | 1861.8 | 67.8% | 520.4 | 378.7 | 37.4% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 317.9 | 359.9 | 13.2% | 1,061.0 | 1,014.4 | 4.6% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 477,530 | 484,272 | 1.4% | 479,314 | 471,512 | 1.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 171,048 | 177,709 | 3.9% | 175,315 | 168,218 | 4.2% |
| Electric Customers (Residential) | 466,676 | 474,256 | 1.6% | 472,427 | 460,398 | 2.6% |
| Electric Customers (Commercial) | 45,206 | 46,171 | 2.1% | 46,209 | 45,046 | 2.6% |
| Natural Gas Customers (Residential & Commercial) | 439,183 | 448,067 | 2.0% | 445,808 | 434,772 | 2.5% |
| Natural Gas Customers (Industrial) | 570 | 550 | -3.5% | 555 | 567 | -2.3% |

# Utah Business Statistics

| UTAH DATA | Nov. 1986 | Nov. 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Davis County | | | | | | |
| Non-Ag. Employment (thous.) | 52.9r | 53.0fo | 0.2% | 53.3 | 53.5 | -0.4% |
| Unemployment Rate | 4.5r | 4.8 | 6.7% | 5.3 | 4.4 | 21.6% |
| Auth. Permit Construction (thous. of dol.) | 9,360.1 | 9,151.4 | -2.2% | 12,769.4 | 14,523.9 | -12.1% |
| New Dwelling Units (no.) | 93 | 59 | -36.6% | 94.3 | 189.6 | -50.3% |
| Postal Receipts (thous. of dol.) | NA | 282 | NA | NA | NA | NA |
| Electric Customers (Residential) | 46,075 | 47,813 | 3.8% | 47,185 | 44,067 | 7.1% |
| Electric Customers (Commercial) | 3,176 | 3,309 | 4.2% | 3,277 | 3,208 | 2.1% |
| Natural Gas Customers (Residential) | 47,202 | 49,216 | 4.3% | 48,704 | 46,148 | 5.5% |
| Natural Gas Customers (Industrial) | 51 | 52 | 2.0% | 52 | 50 | 3.0% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 53,923 | 54,511 | 1.1% | 54,757 | 52,554 | 4.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,197 | 10,722 | 5.1% | 10,510 | 10,074 | 4.3% |
| Salt Lake County | | | | | | |
| Non-Ag. Employment (thous.) | 336.4r | 341.2fo | 1.4% | 335.3 | 329.6 | 1.7% |
| Unemployment Rate | 4.8r | 5.0 | 4.2% | 5.5 | 5.4 | 2.5% |
| Auth. Permit Construction (thous. of dol.) | 32,171.4 | 54,022.2 | 67.9% | 46,292.0 | 58,499.1 | -20.9% |
| New Dwelling Units (no.) | 355 | 152 | -57.2% | 251 | 568 | -55.8% |
| Postal Receipts (thous. of dol.) | 7,444.6 | 8,996 | 20.8% | 7,309 | 7,145 | 2.3% |
| Electric Customers (Residential) | 233,141 | 237,634 | 1.9% | 236,145 | 231,033 | 2.2% |
| Electric Customers (Commercial) | 19,328 | 20,169 | 4.4% | 19,905 | 19,253 | 3.4% |
| Natural Gas Customers (Residential) | 214,151 | 215,853 | 0.8% | 216,977 | 212,231 | 2.2% |
| Natural Gas Customers (Industrial) | 253 | 235 | -7.1% | 241 | 256 | -5.9% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 224,798 | 228,513 | 1.7% | 226,529 | 222,190 | 2.0% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 109,246 | 110,054 | 0.7% | 109,746 | 107,760 | 1.8% |
| Utah County | | | | | | |
| Non-Ag. Employment (thous.) | 75.0r | 76.7fo | 2.3% | 72.4 | 72.3 | 0.0% |
| Unemployment Rate | 6.6r | 5.3 | -19.7% | 7.2 | 6.3 | 14.2% |
| Auth. Permit Construction (thous. of dol.) | 9,582.8 | 8,108.8 | -15.4% | 12,450.3 | 8,861.6 | 40.5% |
| New Dwelling Units (no.) | 82 | 77 | -6.1% | 92.9 | 101.8 | -8.8% |
| Postal Receipts (thous. of dol.) | 955.9 | 923 | -3.5% | 929 | 916 | 1.4% |
| Electric Customers (Residential) | 50,278 | 51,386 | 2.2% | 51,922 | 49,688 | 4.5% |
| Electric Customers (Commercial) | 6,206 | 5,856 | -5.6% | 6,309 | 6,091 | 3.6% |
| Natural Gas Customers (Residential) | 60,259 | 60,626 | 0.6% | 60,223 | 59,592 | 1.1% |
| Natural Gas Customers (Industrial) | 71 | 69 | -2.8% | 71 | 71 | -0.9% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 64,164 | 64,250 | 0.1% | 62,345 | 62,232 | 0.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 16,128 | 19,509 | 21.0% | 18,521 | 15,821 | 17.1% |
| Weber County | | | | | | |
| Non-Ag. Employment (thous.) | 60.7r | 61.5fo | 1.3% | 60.5 | 59.6 | 1.4% |
| Unemployment Rate | 5.1r | 6.6 | 8.2% | 7.1 | 6.1 | 17.6% |
| Auth. Permit Construction (thous. of dol.) | 5,971.0 | 6,264.8 | 4.9% | 8,484.6 | 9,077.9 | -6.5% |
| New Dwelling Units (no.) | 53 | 47 | -11.3% | 69 | 81 | -15.0% |
| Postal Receipts (thous. of dol.) | 648.0 | 583.6 | -9.9% | 610.2 | 619.0 | -1.4% |
| Electric Customers (Residential) | 52,384 | 53,090 | 1.3% | 52,761 | 51,731 | 2.0% |
| Electric Customers (Commercial) | 4,764 | 4,877 | 2.4% | 4,839 | 4,736 | 2.2% |
| Natural Gas Customers (Residential) | 48,299 | 48,891 | 1.2% | 48,956 | 47,934 | 2.1% |
| Natural Gas Customers (Industrial) | 86 | 85 | -1.2% | 85 | 87 | -2.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,241 | 46,043 | 1.8% | 45,929 | 45,309 | 1.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,567 | 11,288 | 6.8% | 10,962 | 10,563 | 3.8% |

$^{r}$ Revised $^{na}$ Not available $^{fo}$ Forecast

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U. S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics

[2] Obtained from Utah Construction Report

[3] Includes services by nonprofit and religious institutions

[4] Includes public schools and college institutions

| NATIONAL DATA | Oct. 1986 | Oct. 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,258.7 | 4,598.0p | 8.0% | 4,428.8 | 4,195.6 | 5.6% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,577.5 | 3,853.8 | 7.7% | 3,704.3 | 3,503.8 | 5.7% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 125.3 | 132.5 | 5.7% | 128.6 | 124.9 | 3.0% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 386.0 | 417.2 | 8.1% | 385.3 | 380.9 | 1.2% |
| Index of Leading Indicators (1967=100) | 181.2 | 193.3 | 6.7% | 188.9 | 177.2 | 6.6% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1967=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 330.5 | 345.3 | 4.5% | 337.8 | 327.7 | 3.1% |
| CPI-U (All Urban Consumers) Food & Beverages | 315.6 | 326.9 | 3.6% | 322.7 | 317.3 | 1.7% |
| CPI-U (All Urban Consumers) Housing | 363.0 | 375.2 | 3.4% | 368.8 | 359.1 | 2.7% |
| CPI-U (All Urban Consumers) Transportation | 302.6 | 321.9 | 6.4% | 313.7 | 313.5 | 0.1% |
| CPI-U (All Urban Consumers) Medical Care | 442.3 | 469.8 | 6.2% | 457.8 | 428.2 | 6.9% |
| CPI-U (All Urban Consumers) Energy | 348.6 | 376.7 | 8.1% | 366.7 | 384.2 | -4.6% |
| Producer Price Index (not seasonally adjusted) (1967=100) | | | | | | |
| Producer Price Index, All Finished Goods | 290.5 | 298.2 | 2.7% | 294.6 | 290.8 | 1.3% |
| GNP Price Deflator (1982=100) (qtly.) | 114.9 | 118.7 | 3.3% | 116.8 | 113.6 | 2.8% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 118.4 | 120.3 | 1.6% | 119.4 | 117.4 | 1.7% |
| Total Civilian Employment (mil.) | 110.2 | 113.2 | 2.7% | 111.9 | 109.2 | 2.5% |
| Unemployment Rate | 6.9 | 6.0 | -13.0% | 6.4 | 7.0 | -9.5% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 21,076.2 | 22,492.4 | 6.7% | 20,649.5 | 18,933.3 | 9.1% |
| Residential | 10,636.0 | 10,124.2 | -4.8% | 9,741.3 | 9,406.4 | 3.6% |
| Nonresidential | 7,123.7 | 8,573.1 | 20.3% | 7,077.6 | 6,205.3 | 14.1% |
| Non-Building | 3,316.5 | 3,795.1 | 14.4% | 3,805.6 | 3,321.5 | 14.6% |
| New Dwelling Units (no.) | 144,441 | 125,645 | -13.0% | 130,003 | 139,932 | -7.1% |
| Interest Rates | | | | | | |
| Short Term (3 month Treasury bill rate) | 5.18 | 6.40 | 23.6% | 5.76 | 6.26 | -7.9% |
| Long Term (30-year Treasury bond yields) | 8.04 | 9.61 | 19.5% | 8.42 | 8.49 | -0.9% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 7.50 | 9.07 | 20.9% | 7.99 | 8.67 | -7.8% |
| Mortgage Rates (new homes) | 9.57 | 8.86 | -7.4% | 9.03 | 10.01 | -9.8% |

p Preliminary

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

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Survey of Current Business, U.S. Department of Commerce: New Home Mortgage Rates.

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Indexes.

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| NATIONAL DATA | Nov. 1986 | Nov. 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,258.7 | 4,598.0p | 8.0% | 4,457.1 | 4,208.5 | 5.9% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,590.3 | 3,936.0 | 9.6% | 3,733.1 | 3,520.1 | 6.1% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 125.7 | 133.1 | 5.9% | 129.2 | 125.0 | 3.4% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 386.0 | 417.2 | 8.1% | 387.9 | 380.2 | 2.0% |
| Index of Leading Indicators (1967=100) | 182.7 | 191.0 | 4.5% | 189.6 | 178.2 | 6.4% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1967=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 330.8 | 345.8 | 4.5% | 339.1 | 328.1 | 3.4% |
| CPI-U (All Urban Consumers) Food & Beverages | 316.4 | 326.7 | 3.3% | 323.6 | 318.4 | 1.6% |
| CPI-U (All Urban Consumers) Housing | 361.7 | 374.9 | 3.6% | 369.9 | 359.7 | 2.8% |
| CPI-U (All Urban Consumers) Transportation | 304.3 | 324.1 | 6.5% | 315.3 | 311.9 | 1.1% |
| CPI-U (All Urban Consumers) Medical Care | 444.6 | 471.7 | 6.1% | 460.1 | 430.8 | 6.8% |
| CPI-U (All Urban Consumers) Energy | 341.7 | 373.5 | 9.3% | 369.4 | 377.3 | -2.1% |
| Producer Price Index (not seasonally adjusted) (1967=100) | | | | | | |
| Producer Price Index, All Finished Goods | 290.7 | 298.1 | 2.5% | 295.2 | 290.3 | 1.7% |
| GNP Price Deflator (1982=100) (qtly.) | 114.9 | 118.7p | 3.3% | 117.1 | 113.8 | 2.9% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 118.6 | 120.5 | 1.6% | 119.6 | 117.6 | 1.7% |
| Total Civilian Employment (mil.) | 110.4 | 113.5 | 2.8% | 112.1 | 109.4 | 2.5% |
| Unemployment Rate | 6.9 | 5.9 | -14.5% | 6.3 | 7.0 | -10.6% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 17,367.1 | 17,929.7 | 3.2% | 20,696.4 | 18,953.8 | 9.2% |
| Residential | 8,360.9 | 8,229.2 | -1.6% | 9,730.3 | 9,435.2 | 3.1% |
| Nonresidential | 6,624.1 | 6,966.6 | 5.2% | 7,106.2 | 6,240.0 | 13.9% |
| Non-Building | 2,382.1 | 2,733.9 | 14.8% | 3,835.0 | 3,278.6 | 17.0% |
| New Dwelling Units (no.) | 122,277 | 104,974 | -14.2% | 128,561 | 139,294 | -7.7% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 5.35 | 5.81 | 8.6% | 5.80 | 6.10 | -5.0% |
| Long Term (30-year Treasury bond yields) | 7.81 | 8.99 | 15.1% | 8.51 | 8.31 | 2.5% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 7.50 | 8.78 | 17.1% | 8.10 | 8.50 | -4.7% |
| Mortgage Rates (new homes) | 9.45 | 8.92 | -5.6% | 8.98 | 9.92 | -9.4% |

p Preliminary

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

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# 1987 - Utah's Counties Experience Moderate Economic Growth

Austin Sargent, Research Analyst

Annually, the Spring issue of the Utah Economic and Business Review details selected business statistics for each of Utah's 29 counties and for the state as a whole. These statistics are presented as indicators of economic activity occurring in each county. The 17 indicators fall into six major categories: Population, Labor Market and Income Data, Tax Data, Construction Activity, and two miscellaneous items - New Car and Truck Sales and "in lieu tax payments" made to states under provisions of federal Public Law 94-565.

Population figures and the percent change for the state and each county are presented in Summary Table 1, along with a percent change for each of the six major categories.

Economic activity in 1987 was again slow throughout the state. Fortunately, most counties saw improved economic activity compared to 1986. The state had small increases in population, employment and wages. Gross taxable sales declined slightly and construction activity declined sharply as did the sale of new cars and trucks (Figure 1).

Nineteen counties had positive growth in the majority of the economic indicators. Box Elder and Summit counties experienced the highest growth rates while Duchesne and Uintah counties experienced declines in all of the indicators in Summary Table 1. The Southeastern, Central and Uintah Basin Multi-County Districts showed declining activity, while Bear River, Mountainland, Southwestern and Wasatch Front Districts had increases in most categories (Summary Table 2). The southeast and central areas of the state continue to show declining activity. Uintah and Duchesne, Grand and Emery still are hurting from the decrease in oil, gas and mining industries. The central area actually was stronger this year in most counties, except Millard. The completion of the IPP project caused a dramatic downturn in nearly all of the categories in Millard county, as shown in the tables.

## Population

Population growth in Utah for 1987 increased 0.8 percent compared to the 1.3 percent growth in 1986. The state's population is now estiamted at 1,678,000. Washington county again had the largest increase in population increase -- 5.4 percent. Summit county's population increased 3.9 percent. Cache, Wasatch, Davis and Morgan counties all had increases in population of more than 2 percent. Rich, Duchesne and Uintah had the largest decreases in population with percent changes in excess of 4 percent. (More detailed information on population is contained in the December 1987 issue of the Utah Economic and Business Review.)

# Summary Table 1
## 1987 Population and Six Other Economic Indicators
## Percent Change by County
## 1986-1987

| | Population | | Average Monthly Nonagricultural Employment | Average Monthly Nonagricultural Wage | Property Taxes Charged | Gross Taxable Sales | Number of New Dwelling Units | Value of Total Construction |
|---|---|---|---|---|---|---|---|---|
| | 1987 Estimate | Percent Change 1986-87 | | | | | | |
| Beaver | 4,900 | -1.0 | 2.1 | -7.0 | -1.9 | -1.3 | -92.9 | 30.7 |
| Box Elder | 37,800 | 1.3 | 5.8 | 1.1 | 4.6 | 10.4 | 34.7 | -20.4 |
| Cache | 69,200 | 2.1 | 1.6 | 3.7 | 10.4 | 5.4 | -30.3 | -35.3 |
| Carbon | 22,400 | -2.6 | -1.3 | 0.0 | -2.6 | 0.5 | 40.9 | 86.2 |
| Daggett | 700 | 0.0 | 9.1 | 1.1 | 5.3 | -23.2 | -- | -- |
| | | | | | | | | |
| Davis | 179,000 | 2.3 | -0.9 | -1.4 | 0.6 | -0.8 | -52.5 | -14.4 |
| Duchesne | 13,700 | -4.2 | -1.4 | -0.5 | -18.1 | -19.3 | -41.9 | -44.1 |
| Emery | 11,600 | -1.7 | -3.8 | -6.8 | 14.1 | -27.6 | 133.3 | -47.7 |
| Garfield | 4,050 | 0.0 | -1.5 | -4.8 | 7.7 | 19.0 | -34.3 | 67.3 |
| Grand | 6,700 | -2.2 | 0.4 | -6.0 | -15.9 | 1.1 | -33.3 | 102.5 |
| | | | | | | | | |
| Iron | 19,500 | 0.0 | 1.9 | -0.7 | 6.3 | 6.9 | -69.5 | 18.1 |
| Juab | 5,800 | 0.0 | -4.6 | 4.9 | -1.2 | 7.0 | -40.0 | -54.2 |
| Kane | 4,850 | 1.0 | 6.1 | -1.1 | 4.7 | 14.0 | -1.7 | 38.4 |
| Millard | 13,200 | -2.9 | -18.3 | -15.1 | 19.7 | -75.1 | -61.5 | -23.6 |
| Morgan | 5,650 | 2.7 | -1.8 | 0.4 | 1.2 | -4.5 | -13.3 | -36.2 |
| | | | | | | | | |
| Piute | 1,550 | 0.0 | 15.0 | 8.2 | -18.2 | 3.9 | -33.3 | -7.0 |
| Rich | 1,950 | -4.9 | -8.3 | 3.5 | -6.5 | -14.1 | -100.0 | -100.0 |
| Salt Lake | 700,000 | 0.4 | 1.3 | 2.7 | 5.6 | 3.3 | -59.0 | -30.6 |
| San Juan | 12,900 | 1.6 | 4.4 | 2.2 | -18.3 | 17.2 | 200.0 | -15.4 |
| Sanpete | 16,600 | 0.6 | 3.6 | 2.6 | -0.8 | 11.1 | 5.9 | -1.2 |
| | | | | | | | | |
| Sevier | 15,800 | 0.0 | 2.8 | 3.5 | -4.3 | 4.1 | -41.9 | -44.8 |
| Summit | 13,200 | 3.9 | 5.2 | 4.9 | -16.3 | 11.7 | 21.2 | 10.0 |
| Tooele | 28,100 | 0.0 | -3.7 | 0.9 | 4.1 | 3.8 | -3.8 | 16.5 |
| Uintah | 21,900 | -4.8 | -5.4 | -2.3 | -10.4 | -5.3 | -46.2 | -48.6 |
| Utah | 257,000 | 1.6 | 1.2 | -0.2 | 4.6 | 7.0 | -8.8 | 44.4 |
| | | | | | | | | |
| Wasatch | 9,700 | 2.6 | 11.0 | -0.4 | -0.6 | 4.2 | -95.2 | -94.8 |
| Washington | 41,200 | 5.4 | 3.4 | 4.6 | 7.9 | 1.9 | -40.5 | -26.8 |
| Wayne | 2,050 | -2.4 | 2.5 | 9.3 | 8.0 | 15.2 | -50.0 | -80.8 |
| Weber | 157,000 | 0.0 | 0.7 | 2.4 | 8.6 | 4.9 | -21.1 | -9.2 |
| | | | | | | | | |
| State Totals | 1,678,000 | 0.8 | 0.9 | 1.5 | 3.2 | -1.5 | -45.7 | -18.5 |

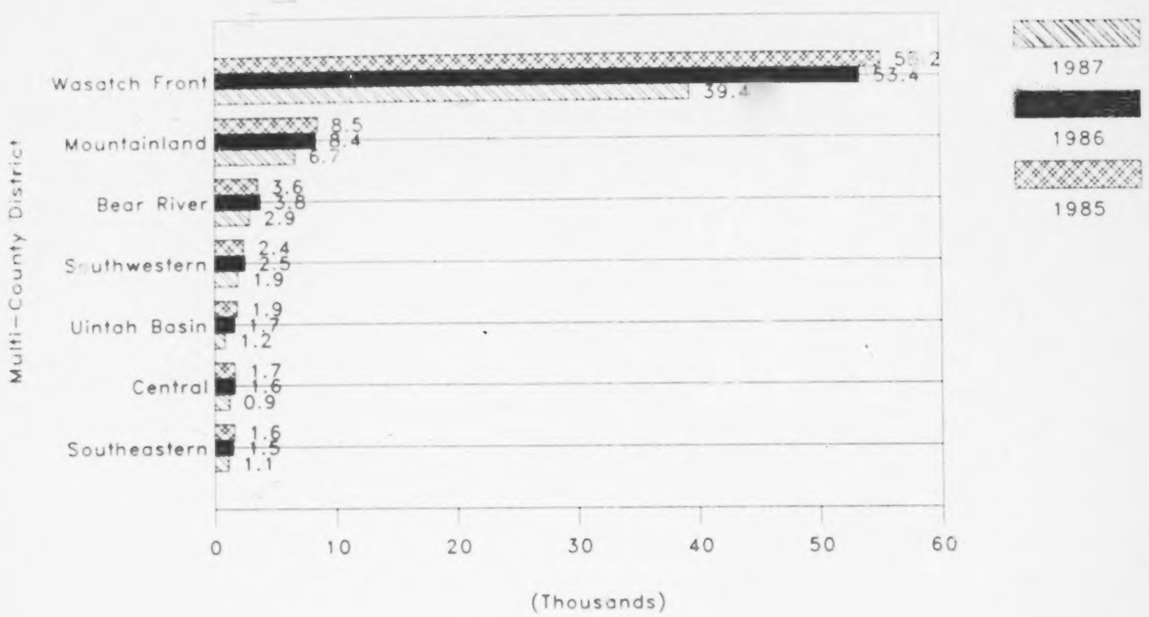
Source: Selected Business Statistics for Utah Counties, beginning p. 6.

## Summary Table 2
## 1987 Population and Six Other Economic Indicators
## Percent Change by County and Multi-County District
## 1986-1987

| | Population | | Average Monthly Nonagricultural Employment | Average Monthly Nonagricultural Wage | Property Taxes Charged | Gross Taxable Sales | Number of New Dwelling Units | Value of Total Construction |
|---|---|---|---|---|---|---|---|---|
| | 1987 Estimate | Percent Change 1986-87 | | | | | | |
| Bear River | 126,500 | 1.7 | 3.1 | 2.9 | 7.0 | 6.9 | -12.0 | -30.1 |
| Box Elder | 37,800 | 1.3 | 5.8 | 1.1 | 4.6 | 10.4 | 34.7 | -20.4 |
| Cache | 69,200 | 2.1 | 1.6 | 3.7 | 10.4 | 5.4 | -30.3 | -35.3 |
| Rich | 1,950 | -4.9 | 8.3 | 3.5 | -6.5 | -14.1 | -100.0 | -100.0 |
| Central | 55,000 | -0.6 | -4.0 | -4.8 | 8.6 | -29.9 | -37.2 | -30.0 |
| Juab | 5,800 | 0.0 | -4.6 | 4.9 | -1.2 | 7.0 | -40.0 | -54.2 |
| Millard | 13,200 | -2.9 | -18.3 | -15.1 | 19.7 | -75.1 | -61.5 | -23.6 |
| Piute | 1,550 | 0.0 | 15.0 | 8.2 | -18.2 | 3.9 | -33.3 | -7.0 |
| Sanpete | 16,600 | 0.6 | 3.6 | 2.6 | -0.8 | 11.1 | 5.9 | -1.2 |
| Sevier | 15,800 | 0.0 | 2.8 | 3.5 | -4.3 | 4.1 | -41.9 | -44.8 |
| Wayne | 2,050 | -2.4 | 2.5 | 9.3 | 8.0 | 15.2 | -50.0 | -80.8 |
| Mountainland | 279,900 | 1.7 | 1.8 | 0.0 | -2.7 | 7.4 | -7.7 | 35.9 |
| Summit | 13,200 | 3.9 | 5.2 | 4.9 | -16.3 | 11.7 | 21.2 | 10.0 |
| Utah | 257,000 | 1.6 | 1.2 | -0.2 | 4.6 | 7.0 | -8.8 | 44.4 |
| Wasatch | 9,700 | 2.6 | 11.0 | -0.4 | -0.6 | 4.2 | -95.2 | -94.8 |
| Southeastern | 53,600 | -1.4 | -0.6 | -2.8 | -0.3 | -2.4 | 40.6 | 49.5 |
| Carbon | 22,400 | -2.6 | -1.3 | 0.0 | -2.6 | 0.5 | 40.9 | 86.2 |
| Emery | 11,600 | -1.7 | -3.8 | -6.8 | 14.1 | -27.6 | 133.3 | -47.7 |
| Grand | 6,700 | -2.2 | 0.4 | -6.0 | -15.9 | 1.1 | -33.3 | 102.5 |
| San Juan | 12,900 | 1.6 | 4.4 | 2.2 | -18.3 | 17.2 | 200.0 | -15.4 |
| Southwestern | 74,500 | 2.9 | 2.7 | 1.2 | 6.5 | 4.6 | -41.0 | -16.7 |
| Beaver | 4,900 | -1.0 | 2.1 | -7.0 | -1.9 | -1.3 | -92.9 | 30.7 |
| Garfield | 4,050 | 0.0 | -1.5 | -4.8 | 7.7 | 19.0 | -34.3 | 67.3 |
| Iron | 19,500 | 0.0 | 1.9 | -0.7 | 6.3 | 6.9 | -69.5 | 18.1 |
| Kane | 4,850 | 1.0 | 6.1 | -1.1 | 4.7 | 14.0 | -1.7 | 38.4 |
| Washington | 41,200 | 5.4 | 3.4 | 4.6 | 7.9 | 1.9 | -40.5 | -26.8 |
| Uintah Basin | 36,300 | -4.5 | -3.6 | -1.7 | -12.8 | -10.9 | -42.5 | -45.3 |
| Daggett | 700 | 0.0 | 9.1 | 1.1 | 5.3 | -23.2 | -- | -- |
| Duchesne | 13,700 | -4.2 | -1.4 | -0.5 | -18.1 | -19.3 | -41.9 | -44.1 |
| Uintah | 21,900 | -4.8 | -5.4 | -2.3 | -10.4 | -5.3 | -46.2 | -48.6 |
| Wasatch Front | 1,069,750 | 0.7 | 0.9 | 2.1 | 5.3 | 3.1 | -53.1 | -25.0 |
| Davis | 179,000 | 2.3 | -0.9 | -1.4 | 0.6 | -0.8 | -52.5 | -14.4 |
| Morgan | 5,650 | 2.7 | -1.8 | 0.4 | 1.2 | -4.5 | -13.3 | -36.2 |
| Salt Lake | 700,000 | 0.4 | 1.3 | 2.7 | 5.6 | 3.3 | -59.0 | -30.6 |
| Tooele | 28,100 | 0.0 | -3.7 | 0.9 | 4.1 | 3.8 | -3.8 | 16.5 |
| Weber | 157,000 | 0.0 | 0.7 | 2.4 | 8.6 | 4.9 | -21.1 | -9.2 |
| State Totals | 1,678,000 | 0.8 | 0.9 | 1.5 | 3.2 | -1.5 | -45.7 | -18.5 |

Source: Selected Business Statistics for Utah Counties, beginning p. 6

Figure 1
New Car and Truck Sales in 1985 - 1987
by Multi-County District



**Employment and Wages**

The slow economic expansion experienced in 1987 was also reflected in slight growth in employment and wages. Employment in Utah rose 0.9 percent while wages increased 1.5 percent. Wasatch county had an 11 percent increase in employment to lead the state. Daggett (9.1), Kane (6.1), Box Elder (5.8) and Summit (5.2) also saw significant increases. Millard county's average monthly nonagricultural employment decreased 18.3 percent due to the completion of the IPP Project. Rich (-14.1), Uintah (-5.4) and Juab (-4.6) were other counties that experienced major losses in employment. Figure 2 shows the increase or decrease of average monthly nonagricultural employment for Utah in 1987.

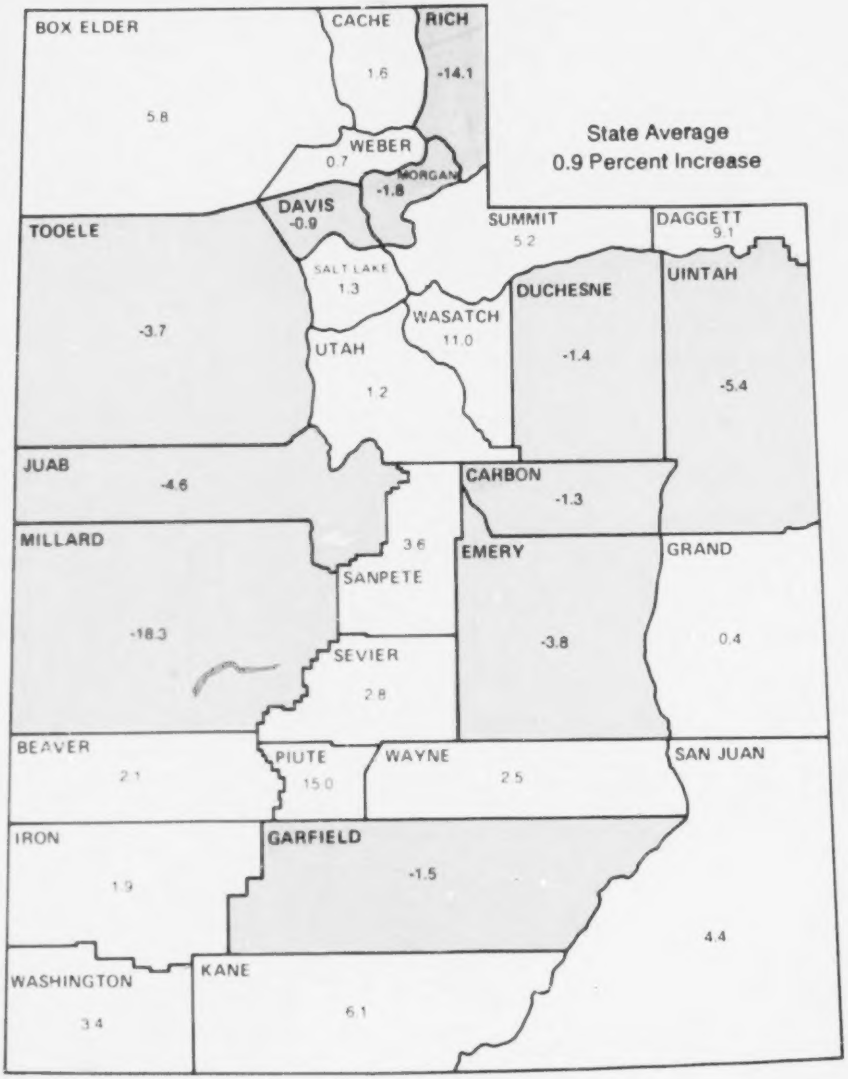
**Income**

Total personal income in the state increased 3.3 percent in 1987 to $18,894 million. Per capita income for 1987 was $11,260 in Utah, an increase of 2.5 percent over 1986. Total personal income and per capita income by county are available for 1984-1986, and are shown in the detail tables. In 1986, Summit county had the highest per capita income ($15,041) in the state. San Juan was the lowest with a per capita income of $7,134. Salt Lake county accounted for 47 percent of the total personal income in 1986 with $8.65 million.

**Taxes**

Tax collections for property and gross taxable sales showed mixed results in 1987. Property taxes increased 3.2 percent compared to last year. Millard county had the largest increase in property tax, up 19.7 percent, due to the IPP Project. The major declines in property taxes charged occurred in those areas where oil, gas and mining activity have decreased dramatically. The largest decrease occurred in San Juan county with property taxes charged declining 18.3 percent. The total assessed valuation decreased 0.3 percent in the state from $47.6 billion in 1986 to $47.5 billion in 1987.

Figure 2
Average Non-Agricultural Employment
Percent Change 1986 - 1987


BOX ELDER
5.8
CACHE
1.6
RICH
-14.1
WEBER
0.7
MORGAN
-1.8
DAVIS
-0.9
State Average
0.9 Percent Increase
TOOELE
-3.7
SALT LAKE
1.3
SUMMIT
5.2
DAGGETT
9.1
DUCHESNE
-1.4
UINTAH
-5.4
WASATCH
11.0
UTAH
1.2
JUAB
-4.6
CARBON
-1.3
MILLARD
-18.3
3.6
SANPETE
EMERY
-3.8
GRAND
0.4
SEVIER
2.8
BEAVER
2.1
PIUTE
15.0
WAYNE
2.5
SAN JUAN
4.4
IRON
1.9
GARFIELD
-1.5
WASHINGTON
3.4
KANE
6.1

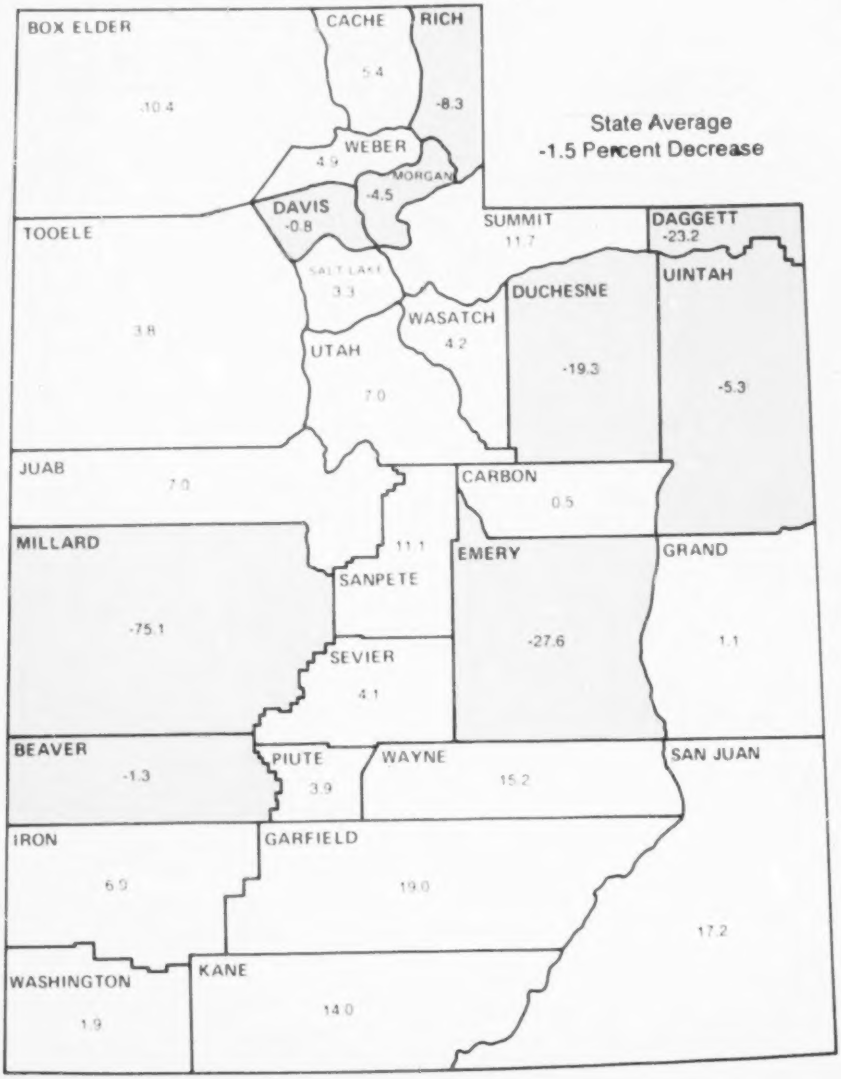
Unlike property taxes, Gross Taxable Sales decreased 1.5 percent in 1987. The largest decrease occurred in Millard county which was down 75.1 percent. Emery (27.6) and Duchesne (-19.3) Counties also had significant declines in gross taxable sales. The percent of Gross Taxable Sales, by county, appears in Figure 3.

## Construction

Construction activity in Utah decreased significantly in 1987. The total value of permit-authorized construction declined 18.5 percent. Residential construction activity in particulary saw substantial decreases in 1987. Total dwelling units permitted declined 45.7 percent with decreases in both single family and multi-family housing units. The value of residential construction was also down 30.8 percent. The value of nonresidential construction in Utah decreased 6.0 percent.

Six of the seven multi-county districts had decreases in the number of dwelling units permitted, and five of the seven had decreases in the total value of construction. Only the Southeastern MCD experienced increased construction activity in both areas. Mountainland's total value of construction increased as well (Summary Table 2). (Detailed statistics relative to construction activity in the communities and counties of Utah are contained in the Utah Construction Report published by the Bureau of Economic and Business Research.)

Figure 3
Gross Taxable Sales
Percent Change 1986 - 1987


BOX ELDER
-10.4
CACHE
5.4
RICH
-8.3
State Average
-1.5 Percent Decrease
WEBER
4.9
MORGAN
-4.5
DAVIS
-0.8
TOOELE
3.8
SALT LAKE
3.3
SUMMIT
11.7
DAGGETT
-23.2
UINTAH
-5.3
DUCHESNE
-19.3
WASATCH
4.2
UTAH
7.0
JUAB
7.0
CARBON
0.5
MILLARD
-75.1
11.1
SANPETE
EMERY
-27.6
GRAND
1.1
SEVIER
4.1
BEAVER
-1.3
PIUTE
3.9
WAYNE
15.2
SAN JUAN
17.2
IRON
6.9
GARFIELD
19.0
WASHINGTON
1.9
KANE
14.0

Footnotes

## County Business Statistics Tables

Totals may not add due to rounding.

a In 1985 the legal assessment rate was 20 percent of reasonable fair cash value. In 1986 it was 100 percent. To provide comparable data for 1986 the actual 1985 figure was multiplied by five.

b Based on Calendar Year.

c Based on Fiscal Year.

na Not available.

p Preliminary.

r Revised.

Population:
Utah Population Work Committee, "1987 Population Estimates for Utah," Vol. 47, No. 12, Utah Economic and Business Review, Bureau of Economic and Business Research (Salt Lake City, December 1987) p. 5.

Labor Market Data:
Utah Department of Employment Security, Annual Report, Vol. III, Labor Market Information, 1984-1986; 1987 data: Utah Department of Employment Security, preliminary data (Salt Lake City, April 1988).

Income Data:
U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, (Washington, D.C., May 1988); Utah Department of Employment Security, Annual Report, Vol. III, Labor Market Information, 1984-1986; 1987 data: Utah Department of Employment Security, preliminary data (Salt Lake City, April 1988).

Tax Data:
Utah State Tax Commission, Annual Report, 1984-85, 1985-86 and 1986-87 (Salt Lake City, April 1985, 1986, 1987); Assessed Valuation: 1984-85, p. 48; 1985-86, pp. 72, 74; 1986-87, p. 20; Property Taxes: 1984-85, p. 50; 1985-86, pp. 77, 78; 1986-87, p. 23; Net Local Sales Tax Allocations: 1985-86, pp. 103-111; 1986-87, pp. 51-59; and Utah State Tax Commission, Calendar Year and Fourth Quarter of 1986 Gross Taxable Retail Sales and Purchases in the State of Utah (Salt Lake City, April 1987), p. 25; and 1987 data; Utah State Tax Commission, unpublished data.

Note: In 1984, 1985 and 1986 the county totals of gross taxable retail sales are less than the total shown for the State of Utah. Out-of-State Use Tax Collections account for the difference between the figures.

Construction Data:
Bureau of Economic and Business Research, Utah Construction Report 1987, Vol. 29, No. 4 (Salt Lake City, December 1987).

Miscellaneous Data:
Utah State Tax Commission, Utah New Car and Truck Sales, First, Second, Third and Fourth Quarters, 1987 (Salt Lake City, April 1988); Bureau of Land Management, News Release (Salt Lake City, September 29, 1987).

| | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| BEAVER | | | | | |
| Population | 5,150 | 5,050 | 4,950 | 4,900[p] | -1.0 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 2,181 | 2,382[r] | 2,159 | 2,110[p] | -2.3 |
| Average nonagricultural employment | 1,311 | 1,440 | 1,259[r] | 1,286[p] | 2.1 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 1,261 | 1,320 | 1,242[r] | 1,155[p] | -7.0 |
| Annual nonagricultural payroll ($ thousands) | 19,834 | 22,804 | 18,763[r] | 17,831[p] | -5.0 |
| Total personal income ($ thousands)[r] | 41,980 | 45,511 | 43,804 | na | -- |
| Per capita personal income ($)[r] | 8,359 | 8,762 | 8,633 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 28,468 | 170,831[a] | 192,815 | 193,454 | 0.3 |
| Property taxes charged, by all taxing units ($ thousands) | 1,572 | 1,895 | 2,268 | 2,224 | -1.9 |
| Gross taxable sales ($ thousands)[b] | 27,426 | 16,779 | 22,016 | 21,726[p] | -1.3 |
| Net local sales tax allocations ($ thousands)[c] | 198 | 197 | 219 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 11 | 15 | 14 | 1 | -92.9 |
| Value of new residential construction ($ thousands) | 455 | 825 | 436 | 22 | -94.9 |
| Value of new nonresidential construction ($ thousands) | 1,096 | 936 | 44 | 942 | 2021.4 |
| Value of total construction ($ thousands) | 1,608 | 1,825 | 745 | 974 | 30.7 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 159 | 153 | 132 | 93 | -29.5 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 225 | 227 | 237 | 244 | 3.0 |
| BOX ELDER | | | | | |
| Population | 35,800 | 36,600 | 37,300 | 37,800[p] | 1.3 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 16,418 | 16,003[r] | 16,505 | 17,426[p] | 5.6 |
| Average nonagricultural employment | 13,035 | 13,743 | 13,993[r] | 14,811[p] | 5.8 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 1,721 | 1,844 | 1,965[r] | 1,986[p] | 1.1 |
| Annual nonagricultural payroll ($ thousands) | 269,229 | 304,065 | 329,954[r] | 352,908[p] | 7.0 |
| Total personal income ($ thousands)[r] | 370,118 | 403,471 | 429,160 | na | -- |
| Per capita personal income ($)[r] | 10,177 | 11,126 | 11,654 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 193,772 | 1,047,885[a] | 1,118,846 | 1,136,772 | 1.6 |
| Property taxes charged, by all taxing units ($ thousands) | 9,697 | 10,585 | 11,771 | 12,310 | 4.6 |
| Gross taxable sales ($ thousands)[b] | 200,738 | 197,656 | 193,597 | 213,730[p] | 10.4 |
| Net local sales tax allocations ($ thousands)[c] | 1,906 | 1,884 | 1,971 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 217 | 116 | 121 | 163 | 34.7 |
| Value of new residential construction ($ thousands) | 8,568 | 6,557 | 5,991 | 10,152 | 69.5 |
| Value of new nonresidential construction ($ thousands) | 2,371 | 2,202 | 11,237 | 3,937 | -65.0 |
| Value of total construction ($ thousands) | 12,847 | 11,044 | 20,178 | 16,058 | -20.4 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 1,430 | 1,533 | 1,577 | 1,191 | -24.5 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 790 | 801 | 821 | 848 | 3.3 |
| CACHE | | | | | |
| Population | 65,600 | 66,700 | 67,800 | 69,200[p] | 2.1 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 26,184 | 26,966[r] | 28,438 | 28,783[p] | 1.2 |
| Average nonagricultural employment | 21,499 | 22,069 | 22,989[r] | 23,356[p] | 1.6 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 1,105 | 1,130 | 1,183[r] | 1,227[p] | 3.7 |
| Annual nonagricultural payroll ($ thousands) | 285,191 | 299,294 | 326,236[r] | 343,904[p] | 5.4 |
| Total personal income ($ thousands)[r] | 541,569 | 577,922 | 621,199 | na | -- |
| Per capita personal income ($)[r] | 8,387 | 8,941 | 9,477 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 190,221 | 1,115,876[a] | 1,172,759 | 1,182,737 | 0.9 |
| Property taxes charged, by all taxing units ($ thousands) | 12,977 | 14,068 | 15,241 | 16,819 | 10.4 |
| Gross taxable sales ($ thousands)[b] | 328,631 | 334,645 | 336,407 | 354,571[p] | 5.4 |
| Net local sales tax allocations ($ thousands)[c] | 3,201 | 3,270 | 3,362 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 351 | 264 | 294 | 205 | -30.3 |
| Value of new residential construction ($ thousands) | 16,507 | 14,321 | 17,964 | 13,259 | -26.2 |
| Value of new nonresidential construction ($ thousands) | 6,768 | 18,912 | 13,268 | 5,024 | -62.1 |
| Value of total construction ($ thousands) | 27,733 | 42,166 | 34,871 | 22,554 | -35.3 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 1,881 | 1,998 | 2,119 | 1,668 | -21.3 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 177 | 172 | 170 | 179 | 5.3 |

|  | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| CARBON |  |  |  |  |  |
| Population | 23,700 | 23,400 | 23,000 | 22,400[p] | -2.6 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 8,864 | 8,777[r] | 8,899 | 8,659[p] | -2.7 |
| Average nonagricultural employment | 7,476 | 7,479 | 7,465[r] | 7,370[p] | -1.3 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,461 | 1,546 | 1,566[r] | 1,566[p] | 0.0 |
| Annual nonagricultural payroll ($ thousands) | 131,111 | 138,801 | 140,292[r] | 138,464[p] | -1.3 |
| Total personal income ($ thousands)[r] | 245,480 | 259,874 | 268,497 | na | -- |
| Per capita personal income ($)[r] | 10,398 | 11,485 | 11,851 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 143,249 | 709,295[a] | 761,044 | 742,211 | -2.5 |
| Property taxes charged, by all taxing units ($ thousands) | 10,130 | 10,247 | 11,003 | 10,721 | -2.6 |
| Gross taxable sales ($ thousands)[b] | 177,614 | 186,419 | 178,323 | 179,215[p] | 0.5 |
| Net local sales tax allocations ($ thousands)[c] | 1,590 | 1,669 | 1,587 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 22 | 21 | 22 | 31 | 40.9 |
| Value of new residential construction ($ thousands) | 1,195 | 1,397 | 1,423 | 1,569 | 10.3 |
| Value of new nonresidential construction ($ thousands) | 4,621 | 15,938 | 1,000 | 4,000 | 300.0 |
| Value of total construction ($ thousands) | 6,633 | 18,974 | 3,273 | 6,093 | 86.2 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 808 | 867 | 860 | 618 | -28.1 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 323 | 328 | 324 | 336 | 3.7 |
| DAGGETT |  |  |  |  |  |
| Population | 750 | 700 | 700 | 700[p] | 0.0 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 318 | 355[r] | 395 | 450[p] | 13.9 |
| Average nonagricultural employment | 243 | 253 | 265[r] | 289[p] | 9.1 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,011 | 1,163 | 1,140[r] | 1,152[p] | 1.1 |
| Annual nonagricultural payroll ($ thousands) | 2,947 | 3,535 | 3,619[r] | 3,996[p] | 10.4 |
| Total personal income ($ thousands)[r] | 6,858 | 7,413 | 7,561 | na | -- |
| Per capita personal income ($)[r] | 8,659 | 9,602 | 10,149 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 16,194 | 75,347[a] | 91,135 | 97,417 | 6.9 |
| Property taxes charged, by all taxing units ($ thousands) | 793 | 733 | 846 | 891 | 5.3 |
| Gross taxable sales ($ thousands)[b] | 4,754 | 6,941 | 5,121 | 3,932[p] | -23.2 |
| Net local sales tax allocations ($ thousands)[c] | 49 | 60 | 44 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 1 | 0 | 0 | 0 | ERR |
| Value of new residential construction ($ thousands) | 28 | 0 | 0 | 0 | ERR |
| Value of new nonresidential construction ($ thousands) | 0 | 0 | 0 | 39 | ERR |
| Value of total construction ($ thousands) | 31 | 0 | 0 | 61 | ERR |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 23 | 30 | 30 | 32 | 6.7 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 35 | 35 | 35 | 36 | 2.9 |
| DAVIS |  |  |  |  |  |
| Population | 166,000 | 170,000 | 175,000 | 179,000[p] | 2.3 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 74,799 | 72,385[r] | 75,375 | 77,611[p] | 3.0 |
| Average nonagricultural employment | 48,868 | 51,361 | 53,009[r] | 52,545[p] | -0.9 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,507 | 1,590 | 1,600[r] | 1,577[p] | -1.4 |
| Annual nonagricultural payroll ($ thousands) | 883,528 | 979,725 | 1,017,716[r] | 994,411[p] | -2.3 |
| Total personal income ($ thousands)[r] | 1,638,341 | 1,799,802 | 1,884,737 | na | -- |
| Per capita personal income ($)[r] | 9,600 | 10,278 | 10,462 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 558,989 | 2,959,885[a] | 3,132,112 | 3,199,004 | 2.1 |
| Property taxes charged, by all taxing units ($ thousands) | 43,108 | 46,193 | 51,968 | 52,255 | 0.6 |
| Gross taxable sales ($ thousands)[b] | 818,428 | 863,702 | 919,655 | 912,450[p] | -0.8 |
| Net local sales tax allocations ($ thousands)[c] | 8,245 | 8,380 | 8,895 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 2,226 | 1,879 | 2,293 | 1,089 | -52.5 |
| Value of new residential construction ($ thousands) | 101,924 | 122,019 | 140,914 | 90,624 | -35.7 |
| Value of new nonresidential construction ($ thousands) | 23,857 | 19,809 | 26,158 | 49,347 | 88.6 |
| Value of total construction ($ thousands) | 140,272 | 152,109 | 176,144 | 150,606 | -14.4 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 8,710 | 8,868 | 8,277 | 6,473 | -21.8 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 22 | 22 | 21 | 21 | 0.0 |

|  | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| DUCHESNE |  |  |  |  |  |
| Population | 14,800 | 14,700 | 14,300 | 13,700[p] | -4.2 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 5,740 | 5,808[r] | 5,790 | 5,508[p] | -4.9 |
| Average nonagricultural employment | 4,365 | 4,338 | 4,003[r] | 3,948[p] | -1.4 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,478 | 1,438 | 1,419[r] | 1,412[p] | -0.5 |
| Annual nonagricultural payroll ($ thousands) | 77,428 | 74,886 | 68,153[r] | 66,872[p] | -1.9 |
| Total personal income ($ thousands)[r] | 141,761 | 142,837 | 146,231 | na | -- |
| Per capita personal income ($)[r] | 9,348 | 9,352 | 9,640 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 220,063 | 1,210,841[a] | 1,279,794 | 853,700 | -32.8 |
| Property taxes charged, by all taxing units ($ thousands) | 11,365 | 12,282 | 12,035 | 9,851 | -18.1 |
| Gross taxable sales ($ thousands)[b] | 134,568 | 133,440 | 99,945 | 80,644[p] | -19.3 |
| Net local sales tax allocations ($ thousands)[c] | 1,131 | 1,108 | 815 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 75 | 67 | 74 | 43 | -41.9 |
| Value of new residential construction ($ thousands) | 2,841 | 1,946 | 1,590 | 1,486 | -6.5 |
| Value of new nonresidential construction ($ thousands) | 452 | 767 | 2,011 | 315 | -84.3 |
| Value of total construction ($ thousands) | 3,595 | 4,764 | 3,921 | 2,193 | -44.1 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 949 | 822 | 860 | 343 | -60.1 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 390 | 394 | 427 | 442 | 3.5 |
| EMERY |  |  |  |  |  |
| Population | 12,400 | 11,800 | 11,800 | 11,600[p] | -1.7 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 4,275 | 4,093[r] | 4,027 | 3,839[p] | -4.7 |
| Average nonagricultural employment | 3,878 | 3,828 | 3,682[r] | 3,543[p] | -3.8 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,998 | 2,089 | 2,158[r] | 2,011[p] | -6.8 |
| Annual nonagricultural payroll ($ thousands) | 92,954 | 95,975 | 95,362[r] | 85,521[p] | -10.3 |
| Total personal income ($ thousands)[r] | 95,794 | 99,299 | 105,474 | na | -- |
| Per capita personal income ($)[r] | 7,453 | 8,233 | 8,634 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 289,179 | 1,388,333[a] | 1,484,720 | 1,547,634 | 4.2 |
| Property taxes charged, by all taxing units ($ thousands) | 19,116 | 17,981 | 19,511 | 22,263 | 14.1 |
| Gross taxable sales ($ thousands)[b] | 47,730 | 53,193 | 60,390 | 43,707[p] | -27.6 |
| Net local sales tax allocations ($ thousands)[c] | 547 | 620 | 666 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 16 | 3 | 3 | 7 | 133.3 |
| Value of new residential construction ($ thousands) | 615 | 100 | 73 | 443 | 506.8 |
| Value of new nonresidential construction ($ thousands) | 1,930 | 249 | 1,116 | 81 | -92.7 |
| Value of total construction ($ thousands) | 3,144 | 452 | 1,347 | 704 | -47.7 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 374 | 398 | 364 | 254 | -30.2 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 391 | 399 | 395 | 408 | 3.3 |
| GARFIELD |  |  |  |  |  |
| Population | 3,950 | 4,050 | 4,050 | 4,050[p] | 0.0 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 1,501 | 1,497[r] | 1,586 | 1,534[p] | -3.3 |
| Average nonagricultural employment | 1,307 | 1,331 | 1,381[r] | 1,360[p] | -1.5 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,047 | 1,036 | 1,095[r] | 1,042[p] | -4.8 |
| Annual nonagricultural payroll ($ thousands) | 16,428 | 16,552 | 18,147[r] | 17,002[p] | -6.3 |
| Total personal income ($ thousands)[r] | 35,371 | 36,980 | 40,240 | na | -- |
| Per capita personal income ($)[r] | 8,686 | 9,199 | 9,819 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 41,653 | 205,248[a] | 160,133 | 161,915 | 1.1 |
| Property taxes charged, by all taxing units ($ thousands) | 1,967 | 2,318 | 1,849 | 1,992 | 7.7 |
| Gross taxable sales ($ thousands)[b] | 21,967 | 22,433 | 24,076 | 28,658[p] | 19.0 |
| Net local sales tax allocations ($ thousands)[c] | 212 | 217 | 231 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 39 | 27 | 35 | 23 | -34.3 |
| Value of new residential construction ($ thousands) | 1,541 | 1,184 | 1,306 | 926 | -29.1 |
| Value of new nonresidential construction ($ thousands) | 1,868 | 452 | 491 | 2,406 | 390.0 |
| Value of total construction ($ thousands) | 3,521 | 2,001 | 2,104 | 3,521 | 67.3 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 155 | 147 | 139 | 108 | -22.3 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 189 | 191 | 202 | 208 | 3.0 |

|  | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| GRAND |  |  |  |  |  |
| Population | 7,650 | 7,050 | 6,850 | 6,700[p] | -2.2 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 3,262 | 3,126[r] | 3,071 | 2,816[p] | -8.3 |
| Average nonagricultural employment | 2,266 | 2,190 | 2,036[r] | 2,044[p] | 0.4 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,186 | 1,194 | 1,185[r] | 1,114[p] | -6.0 |
| Annual nonagricultural payroll ($ thousands) | 32,233 | 31,385 | 28,962[r] | 27,330[p] | -5.6 |
| Total personal income ($ thousands)[r] | 77,823 | 77,645 | 77,191 | na | -- |
| Per capita personal income ($)[r] | 9,997 | 10,570 | 10,906 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 69,110 | 355,085[a] | 340,782 | 262,252 | -23.0 |
| Property taxes charged, by all taxing units ($ thousands) | 3,599 | 4,098 | 4,267 | 3,590 | -15.9 |
| Gross taxable sales ($ thousands)[b] | 58,727 | 57,296 | 51,906 | 52,456[p] | 1.1 |
| Net local sales tax allocations ($ thousands)[c] | 466 | 490 | 465 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 30 | 7 | 6 | 4 | -33.3 |
| Value of new residential construction ($ thousands) | 955 | 223 | 232 | 133 | -42.7 |
| Value of new nonresidential construction ($ thousands) | 222 | 192 | 345 | 1,104 | 220.0 |
| Value of total construction ($ thousands) | 1,478 | 817 | 910 | 1,843 | 102.5 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 131 | 172 | 107 | 151 | 41.1 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 312 | 317 | 314 | 324 | 3.2 |
| IRON |  |  |  |  |  |
| Population | 19,300 | 19,400 | 19,500 | 19,500[p] | 0.0 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 8,203 | 8,315[r] | 8,235[r] | 8,393[p] | 1.9 |
| Average nonagricultural employment | 6,247 | 6,297 | 6,160[r] | 6,278[p] | 1.9 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,071 | 1,087 | 1,106[r] | 1,098[p] | -0.7 |
| Annual nonagricultural payroll ($ thousands) | 80,282 | 82,112 | 81,779[r] | 82,700[p] | 1.1 |
| Total personal income ($ thousands)[r] | 148,787 | 154,595 | 160,857 | na | -- |
| Per capita personal income ($)[r] | 7,742 | 7,821 | 8,138 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 95,138 | 566,256[a] | 591,727 | 663,528 | 12.1 |
| Property taxes charged, by all taxing units ($ thousands) | 7,364 | 8,091 | 8,542 | 9,083 | 6.3 |
| Gross taxable sales ($ thousands)[b] | 152,632 | 165,525 | 136,759 | 146,141[p] | 6.9 |
| Net local sales tax allocations ($ thousands)[c] | 1,443 | 1,288 | 1,269 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 185 | 104 | 82 | 25 | -69.5 |
| Value of new residential construction ($ thousands) | 7,161 | 3,983 | 4,165 | 1,652 | -60.3 |
| Value of new nonresidential construction ($ thousands) | 10,804 | 10,958 | 4,057 | 8,042 | 98.2 |
| Value of total construction ($ thousands) | 19,858 | 15,976 | 8,935 | 10,551 | 18.1 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 736 | 625 | 588 | 521 | -11.4 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 502 | 505 | 516 | 535 | 3.7 |
| JUAB |  |  |  |  |  |
| Population | 6,150 | 6,250 | 5,800 | 5,800[p] | 0.0 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 1,976 | 1,995[r] | 2,058 | 1,973[p] | -4.1 |
| Average nonagricultural employment | 1,496 | 1,483 | 1,471[r] | 1,403[p] | -4.6 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 943 | 973 | 903[r] | 947[p] | 4.9 |
| Annual nonagricultural payroll ($ thousands) | 16,931 | 17,328 | 15,942[r] | 15,940[p] | -0.0 |
| Total personal income ($ thousands)[r] | 48,063 | 47,809 | 48,390 | na | -- |
| Per capita personal income ($)[r] | 8,170 | 7,862 | 8,196 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 38,619 | 220,667[a] | 228,530 | 230,097 | 0.7 |
| Property taxes charged, by all taxing units ($ thousands) | 2,487 | 2,862 | 2,938 | 2,903 | -1.2 |
| Gross taxable sales ($ thousands)[b] | 30,628 | 37,198 | 33,151 | 35,480[p] | 7.0 |
| Net local sales tax allocations ($ thousands)[c] | 306 | 337 | 326 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 52 | 27 | 5 | 3 | -40.0 |
| Value of new residential construction ($ thousands) | 1,748 | 882 | 324 | 225 | -30.6 |
| Value of new nonresidential construction ($ thousands) | 1,281 | 1,422 | 1,142 | 315 | -72.4 |
| Value of total construction ($ thousands) | 3,183 | 2,384 | 1,783 | 816 | -54.2 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 237 | 190 | 187 | 181 | -3.2 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 263 | 267 | 264 | 273 | 3.4 |

| | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| KANE | | | | | |
| Population | 4,500 | 4,700 | 4,800 | 4,850[p] | 1.0 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 1,878 | 2,132[r] | 2,308[r] | 2,449[p] | 6.1 |
| Average nonagricultural employment | 1,068 | 1,196 | 1,297[r] | 1,376[p] | 6.1 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 887 | 939 | 968[r] | 957[p] | -1.1 |
| Annual nonagricultural payroll ($ thousands) | 11,376 | 13,476 | 15,066[r] | 15,800[p] | 4.9 |
| Total personal income ($ thousands)[r] | 38,403 | 43,312 | 46,721 | na | -- |
| Per capita personal income ($)[r] | 8,559 | 9,375 | 9,780 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 29,127 | 154,419[a] | 153,264 | 170,305 | 11.1 |
| Property taxes charged, by all taxing units ($ thousands) | 1,658 | 1,936 | 1,868 | 1,955 | 4.7 |
| Gross taxable sales ($ thousands)[b] | 30,346 | 31,562 | 33,104 | 37,754[p] | 14.0 |
| Net local sales tax allocations ($ thousands)[c] | 273 | 284 | 301 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 21 | 57 | 60 | 59 | -1.7 |
| Value of new residential construction ($ thousands) | 928 | 1,945 | 2,590 | 2,298 | -11.3 |
| Value of new nonresidential construction ($ thousands) | 627 | 631 | 494 | 1,518 | 207.3 |
| Value of total construction ($ thousands) | 1,751 | 2,694 | 3,249 | 4,495 | 38.4 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 96 | 112 | 157 | 103 | -34.4 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 201 | 202 | 206 | 214 | 3.9 |
| MILLARD | | | | | |
| Population | 13,500 | 14,200 | 13,600 | 13,200[p] | -2.9 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 7,495 | 8,806 | 7,361 | 5,824[p] | -20.9 |
| Average nonagricultural employment | 4,748 | 5,621 | 4,459[r] | 3,641[p] | -18.3 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 1,587 | 1,848 | 1,726[r] | 1,465[p] | -15.1 |
| Annual nonagricultural payroll ($ thousands) | 90,445 | 124,660 | 92,355[r] | 64,029[p] | -30.7 |
| Total personal income ($ thousands)[r] | 121,474 | 152,835 | 136,878 | na | -- |
| Per capita personal income ($)[r] | 9,226 | 10,616 | 9,624 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 68,305 | 1,481,082[a] | 2,516,509 | 2,828,600 | 12.4 |
| Property taxes charged, by all taxing units ($ thousands) | 4,138 | 8,929 | 13,585 | 16,263 | 19.7 |
| Gross taxable sales ($ thousands)[b] | 217,767 | 183,534 | 159,461 | 39,648[p] | -75.1 |
| Net local sales tax allocations ($ thousands)[c] | 1,902 | 1,515 | 798 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 91 | 92 | 52 | 20 | -61.5 |
| Value of new residential construction ($ thousands) | 3,630 | 4,901 | 3,330 | 1,220 | -63.4 |
| Value of new nonresidential construction ($ thousands) | 5,709 | 997 | 1,159 | 2,131 | 83.9 |
| Value of total construction ($ thousands) | 9,908 | 6,096 | 5,029 | 3,841 | -23.6 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 562 | 470 | 430 | 276 | -35.8 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 328 | 332 | 392 | 404 | 3.1 |
| MORGAN | | | | | |
| Population | 5,350 | 5,450 | 5,500 | 5,650[p] | 2.7 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 1,618 | 1,690[r] | 1,661 | 1,652[p] | -0.5 |
| Average nonagricultural employment | 942 | 967 | 910[r] | 894[p] | -1.8 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 1,329 | 1,386 | 1,449[r] | 1,455[p] | 0.4 |
| Annual nonagricultural payroll ($ thousands) | 15,023 | 16,087 | 15,824[r] | 15,604[p] | -1.4 |
| Total personal income ($ thousands)[r] | 56,416 | 58,220 | 60,272 | na | -- |
| Per capita personal income ($)[r] | 10,927 | 11,387 | 11,544 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 24,702 | 136,019[a] | 141,751 | 146,129 | 3.1 |
| Property taxes charged, by all taxing units ($ thousands) | 1,696 | 1,885 | 2,005 | 2,030 | 1.2 |
| Gross taxable sales ($ thousands)[b] | 23,726 | 23,856 | 21,388 | 20,430[p] | -4.5 |
| Net local sales tax allocations ($ thousands)[c] | 231 | 253 | 234 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 17 | 20 | 30 | 26 | -13.3 |
| Value of new residential construction ($ thousands) | 1,055 | 1,847 | 1,602 | 1,621 | 1.2 |
| Value of new nonresidential construction ($ thousands) | 410 | 332 | 1,673 | 345 | -79.4 |
| Value of total construction ($ thousands) | 1,615 | 2,470 | 3,491 | 2,226 | -36.2 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 237 | 258 | 244 | 179 | -26.6 |

| | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| **PIUTE** | | | | | |
| Population | 1,500 | 1,550 | 1,550 | 1,550[p] | 0.0 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 406 | 383[r] | 386 | 419[p] | 8.5 |
| Average nonagricultural employment | 193 | 179 | 173[r] | 199[p] | 15.0 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 968 | 962 | 948[r] | 1,026[p] | 8.2 |
| Annual nonagricultural payroll ($ thousands) | 2,243 | 2,066 | 1,969[r] | 2,451[p] | 24.5 |
| Total personal income ($ thousands)[r] | 10,874 | 10,322 | 11,017 | na | -- |
| Per capita personal income ($)[r] | 7,557 | 7,124 | 7,325 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 5,681 | 30,105[a] | 27,347 | 28,441 | 4.0 |
| Property taxes charged, by all taxing units ($ thousands) | 322 | 348 | 341 | 279 | -18.2 |
| Gross taxable sales ($ thousands)[b] | 2,519 | 2,594 | 2,614 | 2,717[p] | 3.9 |
| Net local sales tax allocations ($ thousands)[c] | 38 | 39 | 38 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 1 | 1 | 3 | 2 | -33.3 |
| Value of new residential construction ($ thousands) | 63 | 70 | 143 | 115 | -19.6 |
| Value of new nonresidential construction ($ thousands) | 6 | 11 | 0 | 18 | ERR |
| Value of total construction ($ thousands) | 68 | 81 | 143 | 133 | -7.0 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 44 | 35 | 28 | 23 | -17.9 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 60 | 61 | 65 | 66 | 1.5 |
| **RICH** | | | | | |
| Population | 2,150 | 2,100 | 2,050 | 1,950[p] | -4.9 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 959 | 821[r] | 824 | 717[p] | -13.0 |
| Average nonagricultural employment | 421 | 366 | 336[r] | 308[p] | -8.3 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 998 | 950 | 940[r] | 973[p] | 3.5 |
| Annual nonagricultural payroll ($ thousands) | 5,040 | 4,170 | 3,788[r] | 3,596[p] | -5.1 |
| Total personal income ($ thousands)[r] | 20,172 | 20,387 | 19,569 | na | -- |
| Per capita personal income ($)[r] | 8,254 | 8,746 | 8,647 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 30,995 | 182,892[a] | 162,686 | 156,772 | -3.6 |
| Property taxes charged, by all taxing units ($ thousands) | 1,599 | 1,879 | 1,703 | 1,592 | -6.5 |
| Gross taxable sales ($ thousands)[b] | 12,759 | 8,418 | 8,229 | 7,071[p] | -14.1 |
| Net local sales tax allocations ($ thousands)[c] | 106 | 83 | 85 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 4 | 4 | 3 | 0 | -100.0 |
| Value of new residential construction ($ thousands) | 224 | 363 | 129 | 0 | -100.0 |
| Value of new nonresidential construction ($ thousands) | 781 | 173 | 26 | 0 | -100.0 |
| Value of total construction ($ thousands) | 1,037 | 536 | 168 | 0 | -100.0 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 62 | 58 | 56 | 36 | -35.7 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 118 | 118 | 117 | 122 | 4.3 |
| **SALT LAKE** | | | | | |
| Population | 679,000[r] | 689,000 | 697,000[r] | 700,000[p] | 0.4 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 313,346 | 337,621[r] | 349,190 | 348,546[p] | -0.2 |
| Average nonagricultural employment | 313,412 | 325,682 | 329,939[r] | 334,349[p] | 1.3 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 1,493 | 1,510 | 1,539[r] | 1,580[p] | 2.7 |
| Annual nonagricultural payroll ($ thousands) | 5,615,653 | 5,902,991 | 6,091,776[r] | 6,339,222[p] | 4.1 |
| Total personal income ($ thousands)[r] | 7,798,007 | 8,286,859 | 8,650,607 | na | -- |
| Per capita personal income ($)[r] | 11,410 | 11,963 | 12,314 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 3,221,333 | 17,417,069[a] | 17,786,728 | 18,686,759 | 5.1 |
| Property taxes charged, by all taxing units ($ thousands) | 268,981 | 308,968 | 324,957 | 343,014 | 5.6 |
| Gross taxable sales ($ thousands)[b] | 6,001,023 | 6,178,722 | 6,243,853 | 6,452,810[p] | 3.3 |
| Net local sales tax allocations ($ thousands)[c] | 52,182 | 52,415 | 54,638 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 11,417 | 6,961 | 6,834 | 2,803 | -59.0 |
| Value of new residential construction ($ thousands) | 419,947 | 292,154 | 335,128 | 186,978 | -44.2 |
| Value of new nonresidential construction ($ thousands) | 246,652 | 336,945 | 281,538 | 226,985 | -19.4 |
| Value of total construction ($ thousands) | 757,395 | 702,738 | 719,341 | 499,379 | -30.6 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 37,732 | 37,520 | 35,922 | 26,398 | -26.5 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 54 | 61 | 59 | 62 | 5.1 |

|  | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| **SAN JUAN** |  |  |  |  |  |
| Population | 12,800 | 12,500 | 12,700 | 12,900[p] | 1.6 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 3,676 | 3,563[r] | 3,534 | 3,651[p] | 3.3 |
| Average nonagricultural employment | 2,999 | 2,872 | 2,843 | 2,968[p] | 4.4 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,287 | 1,201 | 1,251[r] | 1,279[p] | 2.2 |
| Annual nonagricultural payroll ($ thousands) | 46,320 | 41,382 | 42,668[r] | 45,548[p] | 6.7 |
| Total personal income ($ thousands)[r] | 77,456 | 76,675 | 80,847 | na | -- |
| Per capita personal income ($)[r] | 6,595 | 6,606 | 7,134 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 199,836 | 904,330[a] | 930,453 | 684,752 | -26.4 |
| Property taxes charged, by all taxing units ($ thousands) | 11,119 | 10,007 | 10,460 | 8,550 | -18.3 |
| Gross taxable sales ($ thousands)[b] | 50,349 | 52,494 | 42,869 | 50,226[p] | 17.2 |
| Net local sales tax allocations ($ thousands)[c] | 563 | 558 | 495 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 15 | 6 | 1 | 3 | 200.0 |
| Value of new residential construction ($ thousands) | 690 | 348 | 60 | 208 | 246.7 |
| Value of new nonresidential construction ($ thousands) | 1,35[illegible] | 190 | 353 | 118 | -66.6 |
| Value of total construction ($ thousands) | 2,6[illegible] | 688 | 577 | 488 | -15.4 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 181 | 160 | 173 | 115 | -33.5 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 364 | 373 | 370 | 383 | 3.5 |
| **SANPETE** |  |  |  |  |  |
| Population | 17,000 | 16,900 | 16,500 | 16,600[p] | 0.6 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 6,172 | 6,066[r] | 6,073 | 6,206[p] | 2.2 |
| Average nonagricultural employment | 3,792 | 3,580 | 3,471 | 3,595[p] | 3.6 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 952 | 969 | 992[r] | 1,018[p] | 2.6 |
| Annual nonagricultural payroll ($ thousands) | 43,343 | 41,617 | 41,318[r] | 43,918[p] | 6.3 |
| Total personal income ($ thousands)[r] | 124,743 | 129,110 | 138,689 | na | -- |
| Per capita personal income ($)[r] | 7,476 | 7,745 | 8,334 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 59,273 | 318,652[a] | 335,667 | 311,316 | -7.3 |
| Property taxes charged, by all taxing units ($ thousands) | 3,901 | 4,301 | 4,646 | 4,610 | -0.8 |
| Gross taxable sales ($ thousands)[b] | 54,659 | 51,934 | 51,139 | 56,839[p] | 11.1 |
| Net local sales tax allocations ($ thousands)[c] | 628 | 605 | 609 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 38 | 65 | 34 | 36 | 5.9 |
| Value of new residential construction ($ thousands) | 1,719 | 1,961 | 1,484 | 2,041 | 37.5 |
| Value of new nonresidential construction ($ thousands) | 1,825 | 4,780 | 1,877 | 1,051 | -44.0 |
| Value of total construction ($ thousands) | 3,872 | 15,881 | 3,761 | 3,716 | -1.2 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 488 | 418 | 474 | 336 | -29.1 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 368 | 372 | 369 | 381 | 3.3 |
| **SEVIER** |  |  |  |  |  |
| Population | 16,100 | 16,200 | 15,800 | 15,800[p] | 0.0 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 6,679 | 6,409[r] | 6,407 | 6,542[p] | 2.1 |
| Average nonagricultural employment | 5,127 | 4,862 | 4,736[r] | 4,870[p] | 2.8 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,267 | 1,224 | 1,282[r] | 1,327[p] | 3.5 |
| Annual nonagricultural payroll ($ thousands) | 77,921 | 71,395 | 72,863[r] | 77,537[p] | 6.4 |
| Total personal income ($ thousands)[r] | 149,724 | 145,965 | 153,216 | na | -- |
| Per capita personal income ($)[r] | 9,371 | 9,289 | 9,832 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 81,590 | 433,621[a] | 430,070 | 419,984 | -2.3 |
| Property taxes charged, by all taxing units ($ thousands) | 4,564 | 5,132 | 5,454 | 5,218 | -4.3 |
| Gross taxable sales ($ thousands)[b] | 107,594 | 111,014 | 102,366 | 106,591[p] | 4.1 |
| Net local sales tax allocations ($ thousands)[c] | 976 | 1,009 | 968 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 37 | 7 | 31 | 18 | -41.9 |
| Value of new residential construction ($ thousands) | 1,880 | 385 | 1,935 | 1,399 | -27.7 |
| Value of new nonresidential construction ($ thousands) | 1,824 | 129 | 3,087 | 748 | -75.8 |
| Value of total construction ($ thousands) | 4,490 | 598 | 5,271 | 2,910 | -44.8 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 483 | 474 | 485 | 355 | -26.8 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 413 | 419 | 436 | 447 | 2.5 |

|  | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| SUMMIT |  |  |  |  |  |
| Population | 12,200 | 12,400 | 12,700 | 13,200[p] | 3.9 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 6,582 | 6,751[r] | 7,209 | 7,630[p] | 5.8 |
| Average nonagricultural employment | 5,670 | 5,822 | 6,093[r] | 6,407[p] | 5.2 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,121 | 1,088 | 1,030[r] | 1,080[p] | 4.9 |
| Annual nonagricultural payroll ($ thousands) | 76,283 | 76,000 | 75,346[r] | 83,069[p] | 10.3 |
| Total personal income ($ thousands)[r] | 168,576 | 187,845 | 194,495 | na | -- |
| Per capita personal income ($)[r] | 13,664 | 15,095 | 15,041 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 527,490 | 3,318,516[a] | 3,276,597 | 2,407,626 | -26.5 |
| Property taxes charged, by all taxing units ($ thousands) | 23,623 | 32,422 | 33,371 | 27,945 | -16.3 |
| Gross taxable sales ($ thousands)[b] | 166,629 | 172,067 | 172,968 | 193,160[p] | 11.7 |
| Net local sales tax allocations ($ thousands)[c] | 1,436 | 1,651 | 1,413 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 602 | 99 | 170 | 206 | 21.2 |
| Value of new residential construction ($ thousands) | 43,343 | 9,139 | 10,343 | 18,531 | 79.2 |
| Value of new nonresidential construction ($ thousands) | 18,948 | 22,694 | 11,387 | 3,056 | -73.2 |
| Value of total construction ($ thousands) | 67,406 | 34,253 | 23,983 | 26,390 | 10.0 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 958 | 955 | 887 | 750 | -15.4 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 320 | 323 | 327 | 334 | 2.1 |
| TOOELE |  |  |  |  |  |
| Population | 28,200 | 28,300 | 28,100 | 28,100[p] | 0.0 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 11,180 | 11,697[r] | 11,907 | 11,317[p] | -5.0 |
| Average nonagricultural employment | 10,146 | 10,468 | 10,327[r] | 9,941[p] | -3.7 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,728 | 1,772 | 1,828[r] | 1,845[p] | 0.9 |
| Annual nonagricultural payroll ($ thousands) | 210,447 | 222,606 | 226,490[r] | 220,099[p] | -2.8 |
| Total personal income ($ thousands)[r] | 299,491 | 321,051 | 323,762 | na | -- |
| Per capita personal income ($)[r] | 10,502 | 10,982 | 11,087 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 147,425 | 597,271[a] | 629,328 | 633,234 | 0.6 |
| Property taxes charged, by all taxing units ($ thousands) | 7,565 | 8,400 | 8,891 | 9,252 | 4.1 |
| Gross taxable sales ($ thousands)[b] | 114,009 | 116,177 | 113,363 | 117,714[p] | 3.8 |
| Net local sales tax allocations ($ thousands)[c] | 1,235 | 1,213 | 1,226 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 111 | 126 | 80 | 77 | -3.8 |
| Value of new residential construction ($ thousands) | 4,853 | 6,201 | 4,388 | 5,522 | 25.8 |
| Value of new nonresidential construction ($ thousands) | 11,076 | 1,456 | 3,470 | 3,368 | -2.9 |
| Value of total construction ($ thousands) | 16,566 | 9,274 | 8,722 | 10,162 | 16.5 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 1,079 | 1,096 | 1,200 | 934 | -22.2 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 670 | 679 | 688 | 710 | 3.2 |
| UINTAH |  |  |  |  |  |
| Population | 24,500 | 24,000 | 23,000 | 21,900[p] | -4.8 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 10,368 | 9,804[r] | 9,035 | 8,544[p] | -5.4 |
| Average nonagricultural employment | 8,466 | 7,776 | 6,694[r] | 6,330[p] | -5.4 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,593 | 1,551 | 1,508[r] | 1,473[p] | -2.3 |
| Annual nonagricultural payroll ($ thousands) | 161,809 | 144,700 | 121,157[r] | 111,908[p] | -7.6 |
| Total personal income ($ thousands)[r] | 243,046 | 232,534 | 222,556 | na | -- |
| Per capita personal income ($)[r] | 9,492 | 9,271 | 9,193 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 360,525 | 2,031,146[a] | 1,858,688 | 1,548,924 | -16.7 |
| Property taxes charged, by all taxing units ($ thousands) | 18,248 | 21,033 | 20,408 | 18,283 | -10.4 |
| Gross taxable sales ($ thousands)[b] | 298,002 | 247,949 | 161,599 | 152,985[p] | -5.3 |
| Net local sales tax allocations ($ thousands)[c] | 2,478 | 2,011 | 1,346 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 74 | 23 | 13 | 7 | -46.2 |
| Value of new residential construction ($ thousands) | 5,113 | 1,965 | 884 | 341 | -61.4 |
| Value of new nonresidential construction ($ thousands) | 30,195 | 7,265 | 2,161 | 459 | -78.8 |
| Value of total construction ($ thousands) | 36,950 | 12,594 | 3,245 | 1,669 | -48.6 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 1,155 | 1,018 | 698 | 498 | -28.7 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 613 | 622 | 674 | 697 | 3.4 |

| | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| **UTAH** | | | | | |
| Population | 247,000 | 250,000 | 253,000 | 257,000[p] | 1.6 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 89,419 | 93,431[r] | 97,584 | 98,841[p] | 1.3 |
| Average nonagricultural employment | 68,050 | 70,143 | 72,478[r] | 73,366[p] | 1.2 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 1,175 | 1,213 | 1,233[r] | 1,230[p] | -0.2 |
| Annual nonagricultural payroll ($ thousands) | 959,246 | 1,021,287 | 1,072,229[r] | 1,082,992[p] | 1.0 |
| Total personal income ($ thousands)[r] | 1,838,578 | 1,969,254 | 2,051,222 | na | -- |
| Per capita personal income ($)[r] | 7,762 | 8,202 | 8,528 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 805,990 | 4,212,405[a] | 4,389,144 | 4,406,284 | 0.4 |
| Property taxes charged, by all taxing units ($ thousands) | 54,518 | 58,501 | 61,003 | 63,788 | 4.6 |
| Gross taxable sales ($ thousands)[b] | 1,225,265 | 1,253,488 | 1,233,664 | 1,319,549[p] | 7.0 |
| Net local sales tax allocations ($ thousands)[c] | 12,280 | 12,284 | 12,379 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 1,323 | 1,022 | 1,200 | 1,095 | -8.8 |
| Value of new residential construction ($ thousands) | 67,768 | 57,978 | 64,101 | 70,670 | 10.2 |
| Value of new nonresidential construction ($ thousands) | 74,370 | 53,800 | 24,674 | 61,939 | 151.0 |
| Value of total construction ($ thousands) | 158,907 | 132,518 | 104,505 | 150,902 | 44.4 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 7,476 | 7,171 | 7,117 | 5,619 | -21.0 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 476 | 482 | 480 | 498 | 3.8 |
| **WASATCH** | | | | | |
| Population | 9,200 | 9,200 | 9,450 | 9,700[p] | 2.6 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 4,083 | 3,900[r] | 4,080 | 4,481[p] | 9.8 |
| Average nonagricultural employment | 2,036 | 1,902 | 1,928[r] | 2,141[p] | 11.0 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 1,034 | 1,001 | 983[r] | 979[p] | -0.4 |
| Annual nonagricultural payroll ($ thousands) | 25,256 | 22,836 | 22,749[r] | 25,146[p] | 10.5 |
| Total personal income ($ thousands)[r] | 88,129 | 93,323 | 93,632 | na | -- |
| Per capita personal income ($)[r] | 9,301 | 9,622 | 9,565 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 55,288 | 287,134[a] | 293,536 | 296,732 | 1.1 |
| Property taxes charged, by all taxing units ($ thousands) | 3,498 | 3,817 | 3,813 | 3,789 | -0.6 |
| Gross taxable sales ($ thousands)[b] | 44,572 | 44,246 | 41,550 | 43,306[p] | 4.2 |
| Net local sales tax allocations ($ thousands)[c] | 447 | 436 | 440 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 72 | 33 | 42 | 2 | -95.2 |
| Value of new residential construction ($ thousands) | 3,828 | 1,986 | 1,617 | 88 | -94.6 |
| Value of new nonresidential construction ($ thousands) | 2,768 | 1,171 | 349 | 0 | -100.0 |
| Value of total construction ($ thousands) | 7,016 | 3,459 | 2,064 | 108 | -94.8 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 437 | 409 | 350 | 289 | -17.4 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 306 | 308 | 308 | 320 | 3.9 |
| **WASHINGTON** | | | | | |
| Population | 32,600 | 35,700 | 39,100 | 41,200[p] | 5.4 |
| Labor Market Data: | | | | | |
| Average civilan labor force | 11,628 | 13,510[r] | 15,356 | 15,634[p] | 1.8 |
| Average nonagricultural employment | 8,047 | 9,361 | 10,452[r] | 10,812[p] | 3.4 |
| Income Data: | | | | | |
| Average monthly nonagricultural wage ($) | 1,044 | 1,080 | 1,101[r] | 1,152[p] | 4.6 |
| Annual nonagricultural payroll ($ thousands) | 100,854 | 121,276 | 138,099[r] | 149,457[p] | 8.2 |
| Total personal income ($ thousands)[r] | 268,903 | 308,002 | 337,056 | na | -- |
| Per capita personal income ($)[r] | 8,258 | 8,744 | 8,725 | na | -- |
| Tax Data: | | | | | |
| Total assessed valuation ($ thousands) | 133,121 | 902,314[a] | 962,543 | 1,071,313 | 11.3 |
| Property taxes charged, by all taxing units ($ thousands) | 9,497 | 12,068 | 14,426 | 15,571 | 7.9 |
| Gross taxable sales ($ thousands)[b] | 225,818 | 266,555 | 300,168 | 305,738[p] | 1.9 |
| Net local sales tax allocations ($ thousands)[c] | 2,072 | 2,317 | 2,557 | na | -- |
| Construction (permit-authorized): | | | | | |
| New Dwelling units (number) | 905 | 3,128 | 896 | 533 | -40.5 |
| Value of new residential construction ($ thousands) | 42,151 | 118,483 | 45,019 | 32,367 | -28.1 |
| Value of new nonresidential construction ($ thousands) | 18,608 | 42,015 | 19,827 | 14,771 | -25.5 |
| Value of total construction ($ thousands) | 63,389 | 164,758 | 69,429 | 50,793 | -26.8 |
| Miscellaneous: | | | | | |
| New car and truck sales (number) | 1,205 | 1,390 | 1,482 | 1,094 | -26.2 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 688 | 690 | 749 | 777 | 3.7 |

|  | 1984 | 1985 | 1986 | 1987 | Percent Change 1986-87 |
|---|---|---|---|---|---|
| **WAYNE** |  |  |  |  |  |
| Population | 2,150 | 2,100 | 2,100 | 2,050[p] | -2.4 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 860 | 898[r] | 947 | 1,042[p] | 10.0 |
| Average nonagricultural employment | 390 | 419 | 438[r] | 449[p] | 2.5 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,068 | 1,243 | 1,145[r] | 1,251[p] | 9.3 |
| Annual nonagricultural payroll ($ thousands) | 4,995 | 6,251 | 6,024[r] | 6,741[p] | 11.9 |
| Total personal income ($ thousands)[r] | 16,089 | 17,197 | 18,135 | na | -- |
| Per capita personal income ($)[r] | 7,647 | 8,055 | 8,607 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 8,752 | 45,595[a] | 50,831 | 49,472 | -2.7 |
| Property taxes charged, by all taxing units ($ thousands) | 463 | 486 | 526 | 568 | 8.0 |
| Gross taxable sales ($ thousands)[b] | 6,807 | 6,715 | 7,110 | 8,191[p] | 15.2 |
| Net local sales tax allocations ($ thousands)[c] | 71 | 74 | 74 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 8 | 1 | 4 | 2 | -50.0 |
| Value of new residential construction ($ thousands) | 285 | 75 | 231 | 33 | -85.7 |
| Value of new nonresidential construction ($ thousands) | 221 | 1,051 | 198 | 0 | -100.0 |
| Value of total construction ($ thousands) | 506 | 1,129 | 448 | 86 | -80.8 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 62 | 97 | 58 | 56 | -3.4 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 99 | 100 | 101 | 104 | 3.0 |
| **WEBER** |  |  |  |  |  |
| Population | 155,000 | 155,000 | 157,000 | 157,000[p] | 0.0 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 71,932 | 70,814[r] | 73,600 | 73,467[p] | -0.2 |
| Average nonagricultural employment | 53,600 | 57,359 | 59,850[r] | 60,244[p] | 0.7 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,257 | 1,297 | 1,318[r] | 1,349[p] | 2.4 |
| Annual nonagricultural payroll ($ thousands) | 808,697 | 892,985 | 946,613[r] | 975,376[p] | 3.0 |
| Total personal income ($ thousands)[r] | 1,713,831 | 1,847,316 | 1,924,355 | na | -- |
| Per capita personal income ($)[r] | 10,999 | 11,734 | 12,122 | na | -- |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 598,369 | 3,032,341[a] | 3,145,967 | 3,382,843 | 7.5 |
| Property taxes charged, by all taxing units ($ thousands) | 46,739 | 48,863 | 52,263 | 56,752 | 8.6 |
| Gross taxable sales ($ thousands)[b] | 1,054,999 | 1,114,170 | 1,145,342 | 1,201,933[p] | 4.9 |
| Net local sales tax allocations ($ thousands)[c] | 9,764 | 9,954 | 10,528 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 862 | 1,072 | 1,042 | 822 | -21.1 |
| Value of new residential construction ($ thousands) | 45,667 | 52,957 | 68,073 | 51,284 | -24.7 |
| Value of new nonresidential construction ($ thousands) | 64,566 | 22,220 | 26,779 | 21,383 | -20.2 |
| Value of total construction ($ thousands) | 137,349 | 99,259 | 111,892 | 101,625 | -9.2 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 7,148 | 7,443 | 7,768 | 5,391 | -30.6 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 42 | 41 | 40 | 512 | 1180.0 |
| **STATE TOTALS** |  |  |  |  |  |
| Population | 1,624,000[r] | 1,645,000 | 1,665,000[r] | 1,678,000[p] | 0.8 |
| Labor Market Data: |  |  |  |  |  |
| Average civilan labor force | 702,000 | 730,000 | 754,000 | 756,000[p] | 0.3 |
| Average nonagricultural employment | 601,098 | 624,387 | 634,138[r] | 640,123[p] | 0.9 |
| Income Data: |  |  |  |  |  |
| Average monthly nonagricultural wage ($) | 1,409 | 1,440 | 1,463[r] | 1,485[p] | 1.5 |
| Annual nonagricultural payroll ($ thousands) | 10,163,045 | 10,792,244 | 11,131,359[r] | 11,408,343[p] | 2.5 |
| Total personal income ($ thousands)[r] | 16,425,857 | 17,553,365 | 18,296,370 | 18,894,000[p] | 3.3 |
| Per capita personal income ($)[r] | 10,115 | 10,670 | 10,986 | 11,260[c]p | 2.5 |
| Tax Data: |  |  |  |  |  |
| Total assessed valuation ($ thousands) | 8,242,459 | 45,510,457[a] | 47,645,503 | 47,506,209 | -0.3 |
| Property taxes charged, by all taxing units ($ thousands) | 586,306 | 660,327 | 701,957 | 724,363 | 3.2 |
| Gross taxable sales ($ thousands)[b] | 12,323,979 | 12,573,850 | 12,378,377 | 12,189,375[p] | -1.5 |
| Net local sales tax allocations ($ thousands)[c] | 105,975 | 106,324 | 107,979 | na | -- |
| Construction (permit-authorized): |  |  |  |  |  |
| New Dwelling units (number) | 18,823 | 15,247 | 13,444 | 7,305 | -45.7 |
| Value of new residential construction ($ thousands) | 786,679 | 706,195 | 715,472 | 495,208 | -30.8 |
| Value of new nonresidential construction ($ thousands) | 535,211 | 567,695 | 439,921 | 413,440 | -6.0 |
| Value of total construction ($ thousands) | 1,494,805 | 1,441,536 | 1,319,527 | 1,075,096 | -18.5 |
| Miscellaneous: |  |  |  |  |  |
| New car and truck sales (number) | 77,904 | 78,196 | 75,901 | 54,085 | -28.7 |
| In lieu tax payments under Public Law 94-565 ($ thousands) | 8,750 | 8,852 | 9,115 | 9,897 | 8.6 |

# Utah Business Statistics

| UTAH DATA | Dec. 1986 | Dec. 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,342 | 19,322 | 5.3% | 18,894 | 18,288 | 3.3% |
| New Corporations (no.) | 531 | 402 | -24.3% | 454 | 467 | -2.8% |
| New Car, Truck and Motorhome Sales (no.) | 6,545 | 4,459 | -31.9% | 4,854 | 6,325 | -19.1% |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 58.40 | 63.80 | 9.2% | 63.53 | 55.10 | 15.3% |
| Lambs (cwt) | 70.50 | 69.10 | -2.0% | 72.33 | 66.28 | 9.1% |
| Milk Wholesale (cwt) | 12.70 | 12.30 | -3.1% | 11.94 | 11.83 | 0.9% |
| Alfalfa Hay, Baled (per ton) | 63.00 | 70.00 | 11.1% | 67.33 | 68.06 | -1.1% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 42,442 | 46,826 | 10.3% | 41,816 | 37,146 | 12.6% |
| Construction | | | | | | |
| Total Construction (thous. of dol.)[1] | 72,559 | 58,266 | -19.7% | 119,648 | 128,529 | -6.9% |
| Residential | 41,548 | 32,821 | -21.0% | 52,792 | 60,322 | -12.5% |
| Nonresidential | 27,277 | 18,740 | -31.3% | 36,256 | 48,340 | -25.0% |
| Public Works and Utilities | 3,734 | 6,705 | 79.6% | 30,600 | 20,118 | 52.1% |
| Total Permit Construction (thous. of dol.)[2] | 72,559.0 | 53,624.9 | -53.7% | 89,591.3 | 109,963.6 | -18.5% |
| Residential | 39,219.0 | 21,616.8 | -44.9% | 41,268.1 | 59,622.7 | -30.8% |
| Nonresidential | 68,283.6 | 23,939.7 | -64.9% | 34,453.4 | 36,660.1 | -6.0% |
| Additions, Alterations and Repairs | 8,346.9 | 8,078.4 | -3.2% | 13,870.7 | 13,701.3 | 1.2% |
| New Dwelling Units (no.) | 673 | 287 | -57.4% | 609 | 1,120 | -45.7% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 763.0 | 759.0 | -0.5% | 756.7 | 750.5 | 0.8% |
| Total Employed Persons | 717.4 | 714.5 | -0.4% | 708.6 | 707.6 | 0.1% |
| Unemployed Persons | 45.6 | 44.5 | -2.4% | 48.1 | 42.5 | 13.2% |
| Percent Total Labor Force | 6.0 | 5.9 | -1.7% | 6.4 | 5.7 | 12.5% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 644.8 | 652.9 | 1.3% | 640.9 | 635.6 | 0.8% |
| Manufacturing | 90.5 | 95.8 | 5.9% | 92.8 | 92.0 | 1.0% |
| Mining | 8.1 | 8.5 | 4.9% | 8.1 | 8.0 | 1.9% |
| Contract Construction | 29.5 | 25.3 | -14.2% | 27.4 | 32.9 | -16.8% |
| Transportaion, Communication and Utilities | 37.9 | 38.4 | 1.3% | 37.7 | 37.3 | 1.1% |
| Wholesale Trade | 36.2 | 34.7 | -4.1% | 35.9 | 35.9 | 0.0% |
| Retail Trade | 123.6 | 123.1 | -0.4% | 118.8 | 117.0 | 1.6% |
| Finance, Insurance and Real Estate | 33.3 | 33.8 | 1.5% | 33.8 | 32.9 | 2.7% |
| Services[3] | 141.6 | 151.0 | 6.6% | 144.8 | 138.3 | 4.6% |
| Federal Government | 40.1 | 39.1 | -2.5% | 39.8 | 40.4 | -1.5% |
| State Government[4] | 38.5 | 37.7 | -2.1% | 37.3 | 37.9 | -1.6% |
| Local Government[4] | 65.1 | 65.5 | 0.6% | 64.4 | 63.1 | 2.1% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 38.8 | 40.7 | 4.9% | 39.9 | 40.1 | -0.6% |
| Mining | 44.0 | 45.1 | 2.5% | 41.4 | 42.7 | -2.9% |
| Wholesale Trade | 38.4 | 38.8 | 1.0% | 38.7 | 36.9 | 4.9% |
| Retail Trade | 28.3 | 28.5 | 0.7% | 28.4 | 28.0 | 1.5% |
| Amount of Unemployment Compensation (thous. of dol.) | 10,469.8 | 6,977.1 | -33.4% | 7,861.5 | 8,462.6 | -7.1% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,458.0 | 2,464.8 | 0.3% | 2,453.4 | 2,392.4 | 2.5% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 58,272.5 | 84,222.1 | 44.5% | 140,423.2 | 123,546.0 | 13.7% |
| Sales and Use Tax | 2,087.6 | 1,213.6 | -41.9% | 47,601.5 | 45,821.1 | 3.9% |
| Motor Fuel Tax | 10,807.0 | 13,230.3 | 22.4% | 9,454.6 | 7,688.7 | 23.0% |
| Individual Income Tax | 33,653.1 | 44,087.5 | 31.0% | 49,386.4 | 38,735.6 | 27.5% |
| Corporation Franchise Tax | (920.0) | 5,912.7 | -742.7% | 6,843.8 | 4,596.2 | 48.9% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,196.4 | 1,192.5 | -0.3% | 1,151.1 | 1,096.1 | 5.0% |
| Crude Oil to Refineries (thous. of bbls.) | 4,153.0 | 4,049.1 | -2.5% | 3,798.3 | 3,794.6 | 0.1% |
| Crude Oil (thous. of bbls.) | 3,161.5 | 2,885.1 | -8.7% | 2,951.0 | 3,257.0 | -9.4% |
| Natural Gas (mil. of cu. ft.) | 23,026.1 | 24,247.7 | 5.3% | 21,627.3 | 19,498.5 | 10.9% |
| Coal (thous. short tons) | 708.0 | 1,542.0 | 117.8% | 1,260.9 | 952.3 | 32.4% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 816,773 | 854,583 | 4.6% | 846,990 | 832,068 | 1.8% |
| Highway Traffic Count Across State Lines | 31,885 | 30,507 | -4.3% | 37,947 | 37,068 | 2.4% |
| Transient Room Taxes (thous. of dol.) | 454.9 | (1,137.7) | -350.1% | 387.7 | 464.3 | -16.5% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 269.4 | 269.3 | 0.0% | 1,060.9 | 1,015.3 | 4.5% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 478,559 | 485,524 | 1.5% | 479,894 | 472,265 | 1.6% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 171,887 | 178,329 | 3.7% | 175,852 | 168,646 | 4.3% |
| Electric Customers (Residential) | 469,000 | 477,056 | 1.7% | 473,099 | 462,094 | 2.4% |
| Electric Customers (Commercial) | 45,762 | 46,566 | 1.8% | 46,276 | 45,226 | 2.3% |
| Natural Gas Customers (Residential & Commercial) | 443,847 | 454,990 | 2.5% | 446,737 | 435,685 | 2.5% |
| Natural Gas Customers (Industrial) | 563 | 548 | -2.7% | 554 | 567 | -2.4% |

# Utah Business Statistics

| UTAH DATA | Dec. 1986 | Dec. 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| **Davis County** | | | | | | |
| Non-Ag. Employment (thous.) | 52.8r | 52.4fo | -0.8% | 53.2 | 53.6 | -0.8% |
| Unemployment Rate | 4.7r | 5.9 | 25.5% | 5.5 | 4.4 | 23.5% |
| Auth. Permit Construction (thous. of dol.) | 7,904.2 | 5,477.3 | -30.7% | 12,567.2 | 14,678.6 | -14.4% |
| New Dwelling Units (no.) | 88 | 46 | -47.7% | 91 | 191 | -52.5% |
| Postal Receipts (thous. of dol.) | NA | 553.0 | NA | 390.9 | NA | NA |
| Electric Customers (Residential) | 46,394 | 47,990 | 3.4% | 47,318 | 45,139 | 4.8% |
| Electric Customers (Commercial) | 3,215 | 3,334 | 3.7% | 3,287 | 3,268 | 0.6% |
| Natural Gas Customers (Residential) | 47,984 | 49,610 | 3.4% | 48,840 | 46,371 | 5.3% |
| Natural Gas Customers (Industrial) | 52 | 52 | 0.0% | 52 | 51 | 2.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 54,187 | 54,642 | 0.8% | 54,795 | 52,825 | 3.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,207 | 10,796 | 5.8% | 10,559 | 10,106 | 4.5% |
| **Salt Lake County** | | | | | | |
| Non-Ag. Employment (thous.) | 339.7r | 340.9fo | 0.4% | 335.1 | 330.2 | 1.5% |
| Unemployment Rate | 5.0r | 5.4 | 8.0% | 5.5 | 5.3 | 3.7% |
| Auth. Permit Construction (thous. of dol.) | 81,447.3 | 25,322.3 | -68.9% | 41,614.9 | 59,945.1 | -30.6% |
| New Dwelling Units (no.) | 312 | 108 | -65.4% | 234 | 570 | -59.0% |
| Postal Receipts (thous. of dol.) | 7,872.5 | 8,009.4 | 1.7% | 7,320.5 | 7,004.8 | 4.5% |
| Electric Customers (Residential) | 235,257 | 239,111 | 1.6% | 236,468 | 231,468 | 2.2% |
| Electric Customers (Commercial) | 19,690 | 20,324 | 3.[illegible]% | 19,957 | 19,314 | 3.3% |
| Natural Gas Customers (Residential) | 216,416 | 219,737 | 1.5% | 217,253 | 212,700 | 2.1% |
| Natural Gas Customers (Industrial) | 253 | 234 | -7.5% | 240 | 256 | -6.3% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 225,121 | 229,088 | 1.8% | 226,860 | 222,587 | 1.9% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 109,808 | 110,406 | 0.5% | 109,796 | 107,987 | 1.7% |
| **Utah County** | | | | | | |
| Non-Ag. Employment (thous.) | 72.4r | 76.1fo | 5.1% | 72.7 | 72.3 | 0.7% |
| Unemployment Rate | 7.2r | 5.4 | -25.0% | 7.0 | 6.3 | 10.6% |
| Auth. Permit Construction (thous. of dol.) | 7,208.3 | 8,706.1 | 20.8% | 12,575.1 | 8,708.8 | 44.4% |
| New Dwelling Units (no.) | 45 | 25 | -44.4% | 91 | 100 | -8.8% |
| Postal Receipts (thous. of dol.) | 1,199.2 | 1,271.9 | 6.1% | 935.1 | 925.8 | 1.0% |
| Electric Customers (Residential) | 50,114 | 51,648 | 3.1% | 52,050 | 49,765 | 4.6% |
| Electric Customers (Commercial) | 6,298 | 5,921 | -6.0% | 6,278 | 6,126 | 2.5% |
| Natural Gas Customers (Residential) | 60,747 | 61,326 | 1.0% | 60,271 | 59,689 | 1.0% |
| Natural Gas Customers (Industrial) | 70 | 69 | -1.4% | 71 | 71 | -1.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 64,171 | 54,380 | 0.3% | 62,362 | 62,340 | 0.0% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 16,216 | 19,570 | 20.7% | 18,800 | 15,889 | 18.3% |
| **Weber County** | | | | | | |
| Non-Ag. Employment (thous.) | 60.1r | 61.1fo | 1.7% | 60.6 | 59.8 | 1.4% |
| Unemployment Rate | 6.8r | 6.4 | -5.9% | 7.1 | 6.2 | 14.6% |
| Auth. Permit Construction (thous. of dol.) | 5,900.6 | 5,710.4 | -3.2% | 8,468.7 | 9,324.3 | -9.2% |
| New Dwelling Units (no.) | 50 | 46 | -8.0% | 69 | 81 | -15.4% |
| Postal Receipts (thous. of dol.) | 832.6 | 851.0 | 2.2% | 611.7 | 620.2 | -1.4% |
| Electric Customers (Residential) | 52,585 | 53,426 | 1.6% | 52,831 | 51,828 | 1.9% |
| Electric Customers (Commercial) | 4,776 | 4,928 | 3.2% | 4,852 | 4,744 | 2.3% |
| Natural Gas Customers (Residential) | 48,901 | 49,528 | 1.3% | 49,008 | 48,019 | 2.1% |
| Natural Gas Customers (Industrial) | 83 | 85 | 2.4% | 85 | 86 | -1.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,680 | 46,093 | 0.9% | 45,964 | 45,399 | 1.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,492 | 11,355 | 8.2% | 11,034 | 10,553 | 4.6% |

r Revised fo Forecast Na - Not available

Sources:

| | |
|---|---|
| **Personal Income:** | Bureau of Economic Analysis, U.S. Department of Commerce |
| **New Corporations:** | Utah Secretary of State |
| **New Car and Truck Sales:** | Utah State Tax Commission, Economic and Statistical Unit |
| **Agriculture:** | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| **Construction Data:** | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| **Employment Data:** | Utah Department of Employment Security |
| **Savings Information:** | Utah Savings and Loan Institutions |
| **Tax Collections:** | Utah State Tax Commission |
| **Net Electric Power Utilized:** | Cooperating Utah power companies |
| **Crude Oil Production:** | Area oil refineries |
| **Natural Gas Production:** | Utah Department of Oil, Gas, and Mining |
| **Coal Production:** | U.S. Department of Energy |
| **Air Passengers:** | Salt Lake City International Airport, Statistics Division |
| **Highway Traffic Count:** | Utah Department of Transportation |
| **Visits to State and National Parks and Monuments:** | U. S. Forest Service, Utah State Parks and Recreation Department |
| **Utilities Data:** | Cooperating Utah utility companies |
| **Postal Receipts:** | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics
[2] Obtained from Utah Construction Report
[3] Includes services by nonprofit and religious institutions
[4] Includes public schools and college institutions
[5] Contract construction data are no longer available

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| NATIONAL DATA | Dec. 1986 | Dec. 1987 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,258.7 | 4,607.4 | 8.2% | 4,488.3 | 4,221.4 | 6.3% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,613.0 | 3,869.1 | 7.1% | 3,746.5 | 3,534.3 | 6.0% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 126.8 | 133.8 | 5.5% | 129.8 | 125.1 | 3.8% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 386.0 | 417.2 | 8.1% | 390.5 | 379.4 | 2.9% |
| Index of Leading Indicators (1967=100) | 186.7 | 191.0 | 2.3% | 189.8 | 179.3 | 5.9% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1967=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 331.1 | 345.7 | 4.4% | 340.4 | 328.4 | 3.7% |
| CPI-U (All Urban Consumers) Food & Beverages | 317.0 | 328.1 | 3.5% | 324.5 | 319.3 | 1.6% |
| CPI-U (All Urban Consumers) Housing | 362.1 | 375.3 | 3.6% | 371.0 | 360.2 | 3.0% |
| CPI-U (All Urban Consumers) Transportation | 304.8 | 323.3 | 6.1% | 316.8 | 310.3 | 2.1% |
| CPI-U (All Urban Consumers) Medical Care | 446.8 | 472.9 | 5.8% | 462.2 | 433.5 | 6.6% |
| CPI-U (All Urban Consumers) Energy | 342.4 | 370.4 | 8.2% | 371.7 | 370.3 | 0.4% |
| Producer Price Index (not seasonally adjusted) (1967=100) | | | | | | |
| Producer Price Index, All Finished Goods | 289.9 | 296.8 | 2.4% | 295.8 | 289.7 | 2.1% |
| GNP Price Deflator (1982=100) (qtly.) | 114.9 | 118.7 | 3.3% | 117.5 | 114.1 | 3.0% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 118.5 | 120.7 | 1.9% | 119.8 | 117.8 | 1.7% |
| Total Civilian Employment (mil.) | 110.6 | 113.7 | 2.8% | 112.4 | 109.6 | 2.6% |
| Unemployment Rate | 6.7 | 5.8 | -13.4% | 6.2 | 7.0 | -11.4% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 17,162.6 | 17,645.5 | 2.8% | 20,736.7 | 19,120.2 | 8.5% |
| Residential | 8,034.0 | 7,827.0 | -2.6% | 9,713.0 | 9,523.4 | 2.0% |
| Nonresidential | 5,584.0 | 6,645.7 | 19.0% | 7,194.7 | 6,263.0 | 14.9% |
| Non-Building | 3,544.6 | 3,152.8 | -11.1% | 3,802.3 | 3,333.9 | 14.0% |
| New Dwelling Units (no.) | 106,448 | 96,363 | -9.5% | 127,721 | 138,542 | -7.8% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 5.49 | 5.80 | 5.6% | 5.83 | 5.97 | -2.5% |
| Long Term (30-year Treasury bond yields) | 7.67 | 9.12 | 18.9% | 8.63 | 8.14 | 6.0% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 7.50 | 8.75 | 16.7% | 8.20 | 8.33 | -1.6% |
| Mortgage Rates (new homes) | 9.28 | 8.78 | -5.4% | 8.94 | 9.82 | -9.0% |

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

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# Personal income in Utah Counties, 1986

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The Bureau of Economic and Business Research has been designated by the United States Department of Commerce, Bureau of Economic Analysis, as a member of the BEA User Group. As such, the Bureau of Economic and Business Research annually receives unpublished BEA estimates of county personal income for the purpose of providing public dissemination of the information. The data in Table 1 have been extracted from the most recently released BEA county personal income estimates for the State of Utah.

## Personal Income and Its Components

*Personal Income* is defined by the BEA to comprise the money value of current income received from all sources by persons residing in a given geographical area, including income received in both monetary and non-monetary forms. Specifically, personal income consists of:

1. Wage and salary disbursements, exclusive of social security taxes and other personal contributions for social insurance paid by employees.
2. Other labor income, which consists of employer contributions for private life and medical insurance, private retirement programs and other private "fringe" benefits.
3. Net income of owners of unincorporated enterprises, exclusive of self-employed contributions for social security and other social insurance.
4. Property income, including dividends, interest and rent.
5. Transfer payments, i.e., personal payments by business or government for which no services are currently rendered.

Income derived from participation in the work force is referred to as *labor and proprietors' income*, or *earnings* and includes (1) wage and salary disbursements, (2) other labor income and (3) net income of owners of unincorporated enterprises. *Net labor and proprietors' income* or *net earnings* is arrived at by deducting social security taxes and other social insurance contributions paid by workers, including self-employment contributions paid by owners of unincorporated enterprises.

Since wage and salary disbursements and other labor income are reported on a place-of-work basis, labor and proprietors' income must be adjusted for the effect of interarea commuting in order to arrive at the earnings component of personal income (which is defined on a place-of-residence basis). This adjustment is accomplished by estimating the difference between the net earnings of persons who reside in a given area but who work in other areas, and the net earnings of persons who work in the given area but reside in other areas. This difference is referred to as the *residence adjustment*.

### BEA Income Imputations

It should be noted that the BEA personal income estimates include imputations or allowances for the value of certain types of income realizations, even though no monetary transaction is involved. These include imputations for:

1. wages and salaries paid in kind, i.e., in the form of food, clothing or lodging;
2. rental value of owner-occupied dwelling units;
3. food and fuel produced and consumed on farms; and
4. interest earned on money deposited with financial intermediaries for which no interest is actually paid or credited.

This last item includes, for example, an imputation for the interest earning potential of bank demand deposit accounts, even though banks do not ordinarily pay interest on such accounts. For the state as a whole, imputed interest amounts to roughly 35 percent of total interest, while imputed rent amounts to approximately 40 percent of total rent.

### BEA Person Concept

It should be further noted that personal income as defined by the Bureau of Economic Analysis includes the income of certain legal entities not ordinarily regarded as "persons," including non-profit institutions, private non-insured pension funds, health and welfare funds and private trust funds. In effect, the current earnings of these organizations are credited directly to their ultimate individual beneficiaries for personal income accounting purposes. Since such organizations are considered to be persons, benefit payments by them to individuals are considered to be transfer payments among persons and not part of personal income. The undistributed earnings of life insurance carriers and private non-insured pension funds are also credited to persons for personal income accounting purposes.

### County Income by Type and Industry

Table 1 presents the most recent Bureau of Economic Analysis county estimates of personal income broken down by type, and earnings broken down by industrial source. It should be stressed that personal income is presented on a place-of-residence basis, i.e., credited to the area of the recipient's residence, while earnings or labor and proprietors' income is presented on a place-of-work basis, i.e., credited to the area in which the earning activity takes place.

Table 1 also reveals the industrial structure of income generation in Utah and its 29 counties. Somewhat surprising, perhaps, is the fact that in only four counties does farming account for more than 10 percent of total earnings. These four counties are Piute (with farming accounting for 30 percent of total earnings), Sanpete (15 percent), Wayne (13 percent) and Morgan (11 percent). For the state as a whole, farming accounts for only about 1 percent of total earnings.

Those counties whose economies may be characterized as distinctly oriented toward mining (including oil and gas extraction) include Emery (where the mining sector accounts for 41 percent of total earnings), Carbon (36 percent), Uintah (21 percent), San Juan (20 percent) and Duchesne (18 percent). Those counties whose economies have a distinctly manufacturing orientation include Box Elder (where manufacturing accounts for 70 percent of total earnings), Cache (27 percent) Morgan (24 percent), Weber (20 percent) and Utah (18 percent).

There are two counties whose economies are dominated by the federal government: Tooele (where federal government accounts for 56 percent of total earnings) and Davis (41 percent). In Daggett the federal government accounts for 25 percent of total earnings; but in addition the state and local government sector accounts for 29 percent of total earnings--so that 54 percent of total earnings in Daggett come from government employment.

There are only four counties for which property income and transfer payments account for 40 percent or more of total personal income. These are Piute (49 percent), Washington (41 percent), Beaver (41 percent) and Wayne (41 percent). The relatively high dependence of these counties on property income and transfer payments can be explained in part by the relatively high proportion of persons of retirement age in their populations. In 1980 Piute County, for example, led the state with 17 percent of its population age 65 or over. Washington and Beaver Counties were not far behind, with 13 to 14 percent of their populations being age 65 or over.*

### Growth Sectors and Counties

For the state as a whole two sectors showed substantial sustained growth over the period from

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*See U.S. Department of Commerce, Bureau of the Census, 1980 Census Report STF 1 1980, Tables 10, 12(1982).

1981 through 1986: (1) finance, insurance and real estate, with a growth rate of 11 percent per annum and (2) services, with a growth rate of 10 percent per annum. Two other sectors grew almost as rapidly: (1) military, with a growth rate of 9 percent per annum and (2) state and local government, also with a growth rate of 9 percent per annum.

Those counties exhibiting growth rates during the five-year period that were higher than the state average in the finance, insurance and real estate sector were Summit, with a growth rate of 23 percent per annum, Garfield (15 percent per annum) and Salt Lake (12 percent per annum). Salt Lake was the only county among these that was able to sustain a growth rate above the state average through to the end of the period, that is, between 1985 and 1986.

Those counties showing high growth rates in the services sector were Daggett, with a growth rate of 17 percent per annum, Kane (16 percent per annum), Tooele (15 percent per annum), Piute (14 percent per annum), Summit (14 percent per annum) and Washington (14 percent per annum). Of these counties only Kane and Washington were able to sustain growth rates above the state average in the services sector between 1985 and 1986.

Those counties experiencing rapid growth in the military sector were Weber, with a growth rate of 25 percent per annum, Millard (24 percent per annum) and Washington (20 percent per annum). All three of these counties maintained growth rates higher than the state average through the end of the five-year period 1981-1986.

Those counties exhibiting relatively rapid growth in state and local government earnings over the five-year period were Summit, with a growth rate of 14 percent per annum, Washington (12 percent) and Millard (12 percent). By the end of the period though the rate of growth in state and local government earnings in Millard county had dropped off to substantially less than the state average.

Four counties stood out in the overall relative growth in personal income over the five-year period: Millard recorded the highest, with a growth rate of 25 percent per annum, followed by Washington with a growth rate of 13 percent per annum. Box Elder and Kane counties were close behind, each with a growth rate of 11 percent per annum. It is noteworthy that by the end of the period the rate of growth in personal income in Millard County had dropped off to a negative 21 percent (between 1985 and 1986). This was due mainly to the decline in the construction sector following completion of the Intermountain Power Project.

## Per Capita Personal Income

Per capita personal income figures for Utah counties in 1986 are also shown in Table 1 (on the second line). Summit County had the highest per capita personal income at $15,041, followed by Salt Lake ($12,314), Weber ($12,122), Carbon ($11,851) and Box Elder ($11,654). A per capita personal income time series for the State of Utah from 1969 to 1987 is presented in Table 2. These data show that Utah's position advanced from 79 percent of the national average in 1969 to 83 percent of the national average by 1977, but has since slipped to only 73 percent of the national average. It should be noted that the estimates of per capita personal income in Table 2 are based on Bureau of the Census revised state population estimates, whereas the estimates of per capita personal income in Table 1 are based on estimates of county population that have not been revised to reflect the revision in the state population estimates. This accounts for the slight discrepancy between the estimated per capita personal income for the State of Utah as shown in Table 1 as compared to Table 2.

Table 2
Utah Per Capita Personal Income
1969-1987

| Year | Amount (dollars) | Percent of U.S. Average | State Rank |
|---|---|---|---|
| 1969 | 3,026 | 79 | 38 |
| 1970 | 3,297 | 81 | 38 |
| 1971 | 3,547 | 83 | 39 |
| 1972 | 3,861 | 83 | 39 |
| 1973 | 4,217 | 81 | 42 |
| 1974 | 4,613 | 82 | 42 |
| 1975 | 4,988 | 82 | 39 |
| 1976 | 5,513 | 83 | 39 |
| 1977 | 6,068 | 83 | 39 |
| 1978 | 6,766 | 83 | 40 |
| 1979 | 7,407 | 82 | 41 |
| 1980 | 7,952 | 80 | 45 |
| 1981 | 8,660 | 79 | 45 |
| 1982 | 9,041 | 79 | 45 |
| 1983 | 9,400 | 78 | 45 |
| 1984 | 10,120 | 77 | 46 |
| 1985 | 10,676 | 77 | 47 |
| 1986 | 10,994 | 75 | 48 |
| 1987p | 11,246 | 73 | 48 |

p = preliminary

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System.

## Table 1
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | State of Utah | | | Beaver | | | Box Elder | | |
|---|---|---|---|---|---|---|---|---|---|
| | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| **Income by Place of Residence** | | | | | | | | | |
| Total personal income | 18,296,370 | 100.0$^{a}$ | 4.2 | 43,804 | 100.0$^{a}$ | -3.7 | 429,160 | 100.0$^{a}$ | 6.4 |
| Per capita personal income (dollars) | 10,986 | 75.1$^{b}$ | 3.0 | 8,633 | 59.0$^{b}$ | -1.4 | 11,654 | 79.7$^{b}$ | 4.7 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 14,107,930 | 100.0$^{c}$ | 3.7 | 26,818 | 100.0$^{c}$ | -10.4 | 415,570 | 100.0$^{c}$ | 9.9 |
| Less: Contributions for social insurance | 832,160 | 5.9$^{c}$ | 3.8 | 1,549 | 5.8$^{c}$ | -14.6 | 24,108 | 5.8$^{c}$ | 9.4 |
| Plus: Residence adjustment | 73,035 | | -1.5 | 586 | | 46.1 | -66,775 | | (U) |
| Equals: Net earnings by place of residence | 13,348,805 | 73.0$^{a}$ | 3.7 | 25,855 | 59.0$^{a}$ | -9.3 | 324,687 | 75.7$^{a}$ | 6.9 |
| Plus: Dividends, interest, and rent | 2,439,014 | 13.3$^{a}$ | 5.2 | 7,681 | 17.5$^{a}$ | 7.8 | 50,482 | 11.8$^{a}$ | 4.8 |
| Plus: Transfer payments | 2,508,551 | 13.7$^{a}$ | 6.2 | 10,268 | 23.4$^{a}$ | 4.4 | 53,991 | 12.6$^{a}$ | 4.8 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 11,639,776 | 82.5$^{c}$ | 3.1 | 18,624 | 69.4$^{c}$ | -18.7 | 341,379 | 82.1$^{c}$ | 8.3 |
| Other labor income | 1,084,347 | 7.7$^{c}$ | 1.4 | 1,497 | 5.6$^{c}$ | -23.2 | 46,459 | 11.2$^{c}$ | 8.9 |
| Proprietor's income | 1,383,807 | 9.8$^{c}$ | 11.6 | 6,697 | 25.0$^{c}$ | 31.7 | 27,732 | 6.7$^{c}$ | 35.9 |
| Farm | 95,055 | .7$^{c}$ | 97.9 | 2,635 | 9.8$^{c}$ | 97.8 | 3,680 | .9$^{c}$ | (U) |
| Nonfarm | 1,288,752 | 9.1$^{c}$ | 8.1 | 4,062 | 15.1$^{c}$ | 8.2 | 24,052 | 5.8$^{c}$ | 8.2 |
| Earnings by industry | | | | | | | | | |
| Farm | 143,290 | 1.0$^{c}$ | 49.5 | 3,739 | 13.9$^{c}$ | 54.4 | 8,042 | 1.9$^{c}$ | 222.2 |
| Nonfarm | 13,964,640 | 99.0$^{c}$ | 3.4 | 23,079 | 86.1$^{c}$ | -16.1 | 407,528 | 98.1$^{c}$ | 8.5 |
| Private | 10,932,371 | 77.5$^{c}$ | 2.8 | 16,961 | 63.2$^{c}$ | -22.6 | 376,504 | 90.6$^{c}$ | 8.5 |
| Agricultural services and other | 38,793 | .3$^{c}$ | -7.6 | 116 | .4$^{c}$ | (U) | (D) | (D) | (D) |
| Mining | 328,783 | 2.3$^{c}$ | -13.5 | 130 | .5$^{c}$ | (U) | (D) | (D) | (D) |
| Construction | 1,041,013 | 7.4$^{c}$ | -5.2 | 2,636 | 9.8$^{c}$ | -61.2 | 16,635 | 4.0$^{c}$ | 1.4 |
| Manufacturing | 2,368,004 | 16.8$^{c}$ | .7 | 387 | 1.4$^{c}$ | -1.2 | 290,369 | 69.9$^{c}$ | 10.4 |
| Nondurable goods | 581,477 | 4.1$^{c}$ | 5.9 | 53 | .2$^{c}$ | (U) | 1,693 | .4$^{c}$ | -3.7 |
| Durable goods | 1,786,527 | 12.7$^{c}$ | -.7 | 334 | 1.2$^{c}$ | (U) | 288,676 | 69.5$^{c}$ | 10.5 |
| Transportation and public utilities | 1,202,878 | 8.5$^{c}$ | 1.6 | (D) | (D) | (D) | 6,501 | 1.6$^{c}$ | -6.9 |
| Wholesale trade | 903,420 | 6.4$^{c}$ | 2.9 | 276 | 1.0$^{c}$ | 10.8 | 8,227 | 2.0$^{c}$ | -7.2 |
| Retail trade | 1,408,422 | 10.0$^{c}$ | 4.9 | 3,397 | 12.7$^{c}$ | 5.6 | 23,857 | 5.7$^{c}$ | 10.1 |
| Finance, insurance, and real estate | 771,193 | 5.5$^{c}$ | 11.6 | 580 | 2.2$^{c}$ | 3.8 | 3,919 | .9$^{c}$ | 9.1 |
| Services | 2,869,865 | 20.3$^{c}$ | 7.7 | (D) | (D) | (D) | 25,077 | 6.0$^{c}$ | 1.8 |
| Government | 3,032,269 | 21.5$^{c}$ | 5.7 | 6,118 | 22.8$^{c}$ | 9.1 | 31,024 | 7.5$^{c}$ | 7.5 |
| Federal, civilian | 1,025,747 | 7.3$^{c}$ | 1.6 | 998 | 3.7$^{c}$ | 7.4 | 2,780 | .7$^{c}$ | -2.4 |
| Military | 199,301 | 1.4$^{c}$ | 6.2 | 191 | .7$^{c}$ | 18.6 | 1,552 | .4$^{c}$ | 17.0 |
| State and local | 1,807,221 | 12.8$^{c}$ | 8.1 | 4,929 | 18.4$^{c}$ | 9.1 | 26,692 | 6.4$^{c}$ | 8.2 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

## Table 1 (continued)
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | Cache | | | Carbon | | | Daggett | | |
|---|---|---|---|---|---|---|---|---|---|
| **Income by Place of Residence** | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| Total personal income | 621,199 | 100.0[a] | 7.5 | 268,497 | 100.0[a] | 3.3 | 7,561 | 100.0[a] | 2.0 |
| Per capita personal income (dollars) | 9,477 | 64.8[b] | 6.0 | 11,851 | 81.0[b] | 3.2 | 10,149 | 69.4[b] | 5.7 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 414,357 | 100.0[c] | 10.5 | 181,885 | 100.0[c] | 1.4 | 4,696 | 100.0[c] | 3.6 |
| Less: Contributions for social insurance | 23,625 | 5.7[c] | 8.7 | 10,820 | 5.9[c] | 1.8 | 257 | 5.5[c] | 2.4 |
| Plus: Residence adjustment | 54,708 | | -2.5 | 17,690 | | 13.3 | 1,122 | | -12.7 |
| Equals: Net earnings by place of residence | 445,440 | 71.7[a] | 8.8 | 188,755 | 70.3[a] | 2.4 | 5,561 | 73.5[a] | .0 |
| Plus: Dividends, interest, and rent | 90,103 | 14.5[a] | 4.8 | 34,444 | 12.8[a] | 5.0 | 777 | 10.3[a] | 6.1 |
| Plus: Transfer payments | 85,656 | 13.8[a] | 3.9 | 45,298 | 16.9[a] | 6.1 | 1,223 | 16.2[a] | 9.9 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 325,005 | 78.4[c] | 9.0 | 146,961 | 80.8[c] | .8 | 3,767 | 80.2[c] | 2.3 |
| Other labor income | 34,358 | 8.3[c] | 7.5 | 18,353 | 10.1[c] | .6 | 310 | 6.6[c] | -1.2 |
| Proprietor's income | 54,994 | 13.3[c] | 22.2 | 16,571 | 9.1[c] | 8.2 | 619 | 13.2[c] | 15.9 |
| Farm | 5,037 | 1.2[c] | (U) | 1,789 | 1.0[c] | 7.8 | (L) | (L) | (L) |
| Nonfarm | 49,957 | 12.1[c] | 8.3 | 14,782 | 8.1[c] | 8.2 | 602 | 12.8[c] | 12.3 |
| Earnings by industry | | | | | | | | | |
| Farm | 9,450 | 2.3[c] | 186.9 | 2,098 | 1.2[c] | 6.7 | 110 | 2.3[c] | 23.6 |
| Nonfarm | 404,907 | 97.7[c] | 8.9 | 179,787 | 98.8[c] | 1.3 | 4,586 | 97.7[c] | 3.2 |
| Private | 298,412 | 72.0[c] | 9.8 | 148,572 | 81.7[c] | .8 | 2,025 | 43.1[c] | 8.7 |
| Agricultural services and other | 2,604 | .6[c] | 10.8 | 109 | .1[c] | (U) | (L) | (L) | (L) |
| Mining | 668 | .2[c] | -15.0 | 64,988 | 35.7[c] | .0 | (L) | (L) | (L) |
| Construction | 37,982 | 9.2[c] | 15.0 | 9,251 | 5.1[c] | 13.5 | 241 | 5.1[c] | (U) |
| Manufacturing | 111,798 | 27.0[c] | 9.3 | 4,238 | 2.3[c] | -7.6 | 0 | .0[c] | (U) |
| Nondurable goods | 79,447 | 19.2[c] | 10.7 | 3,105 | 1.7[c] | -6.3 | 0 | .0[c] | (U) |
| Durable goods | 32,351 | 7.8[c] | 5.9 | 1,133 | .6[c] | -11.0 | 0 | .0[c] | (U) |
| Transportation and public utilities | 13,953 | 3.4[c] | 4.4 | 16,195 | 8.9[c] | -9.8 | 864 | 18.4[c] | (U) |
| Wholesale trade | 8,084 | 2.0[c] | -1.9 | 8,310 | 4.6[c] | 10.1 | 0 | .0[c] | (U) |
| Retail trade | 39,661 | 9.6[c] | 7.7 | 16,608 | 9.1[c] | 5.3 | 326 | 6.9[c] | 43.0 |
| Finance, insurance, and real estate | 11,974 | 2.9[c] | 21.9 | 3,785 | 2.1[c] | (U) | (L) | (L) | (L) |
| Services | 71,688 | 17.3[c] | 10.0 | 25,088 | 13.8[c] | 1.6 | 583 | 12.4[c] | (U) |
| Government | 106,495 | 25.7[c] | 6.6 | 31,215 | 17.2[c] | 3.7 | 2,561 | 54.5[c] | -.6 |
| Federal, civilian | 7,847 | 1.9[c] | 1.1 | 5,179 | 2.8[c] | -3.8 | 1,193 | 25.4[c] | -8.0 |
| Military | 3,282 | .8[c] | 18.7 | 850 | .5[c] | 18.5 | (L) | (L) | (L) |
| State and local | 95,366 | 23.0[c] | 6.7 | 25,186 | 13.8[c] | 5.0 | 1,341 | 28.6[c] | 6.5 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

## Table 1 (continued)
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | Davis | | | Duchesne | | | Emery | | |
|---|---|---|---|---|---|---|---|---|---|
| | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| **Income by Place of Residence** | | | | | | | | | |
| Total personal income | 1,884,737 | 100.0$^{a}$ | 4.7 | 146,231 | 100.0$^{a}$ | 2.4 | 105,474 | 100.0$^{a}$ | 6.2 |
| Per capita personal income (dollars) | 10,462 | 71.5$^{b}$ | 1.8 | 9,640 | 65.9$^{b}$ | 3.1 | 8,634 | 59.0$^{b}$ | 4.9 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 1,355,622 | 100.0$^{c}$ | 3.8 | 98,740 | 100.0$^{c}$ | -4.2 | 121,415 | 100.0$^{c}$ | .5 |
| Less: Contributions for social insurance | 76,042 | 5.6$^{c}$ | 3.8 | 5,459 | 5.5$^{c}$ | -6.9 | 6,898 | 5.7$^{c}$ | .7 |
| Plus: Residence adjustment | 181,066 | | 8.5 | 13,888 | | 53.3 | -33,268 | | (U) |
| Equals: Net earnings by place of residence | 1,460,646 | 77.5$^{a}$ | 4.4 | 107,169 | 73.3$^{a}$ | .7 | 81,249 | 77.0$^{a}$ | 6.5 |
| Plus: Dividends, interest, and rent | 188,585 | 10.0$^{a}$ | 5.7 | 19,856 | 13.6$^{a}$ | 5.2 | 9,224 | 8.7$^{a}$ | 6.9 |
| Plus: Transfer payments | 235,506 | 12.5$^{a}$ | 6.0 | 19,206 | 13.1$^{a}$ | 9.5 | 15,001 | 14.2$^{a}$ | 4.2 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 1,160,204 | 85.6$^{c}$ | 3.6 | 71,526 | 72.4$^{c}$ | -8.5 | 98,186 | 80.9$^{c}$ | -.5 |
| Other labor income | 84,243 | 6.2$^{c}$ | .4 | 7,552 | 7.6$^{c}$ | -10.6 | 14,918 | 12.3$^{c}$ | 1.3 |
| Proprietor's income | 111,175 | 8.2$^{c}$ | 8.7 | 19,662 | 19.9$^{c}$ | 19.4 | 8,311 | 6.8$^{c}$ | 12.9 |
| Farm | 4,862 | .4$^{c}$ | 29.2 | 3,212 | 3.3$^{c}$ | 196.3 | 1,729 | 1.4$^{c}$ | 38.8 |
| Nonfarm | 106,313 | 7.8$^{c}$ | 7.9 | 16,450 | 16.7$^{c}$ | 7.0 | 6,582 | 5.4$^{c}$ | 7.7 |
| Earnings by industry | | | | | | | | | |
| Farm | 7,297 | .5$^{c}$ | 18.0 | 4,423 | 4.5$^{c}$ | 93.0 | 2,216 | 1.8$^{c}$ | 27.9 |
| Nonfarm | 1,348,325 | 99.5$^{c}$ | 3.8 | 94,317 | 95.5$^{c}$ | -6.4 | 119,199 | 98.2$^{c}$ | .1 |
| Private | 688,844 | 50.8$^{c}$ | 5.5 | 72,875 | 73.8$^{c}$ | -9.9 | 106,083 | 87.4$^{c}$ | -.4 |
| Agricultural services and other | 2,360 | .2$^{c}$ | 14.3 | 334 | .3$^{c}$ | 2.8 | 112 | .1$^{c}$ | 7.7 |
| Mining | 2,841 | .2$^{c}$ | -51.4 | 18,073 | 18.3$^{c}$ | -12.6 | 50,195 | 41.3$^{c}$ | 3.3 |
| Construction | 113,693 | 8.4$^{c}$ | 17.4 | 10,103 | 10.2$^{c}$ | -28.1 | 5,888 | 4.8$^{c}$ | -32.5 |
| Manufacturing | 166,922 | 12.3$^{c}$ | -3.2 | 6,798 | 6.9$^{c}$ | -15.3 | 68 | .1$^{c}$ | 13.3 |
| Nondurable goods | 44,683 | 3.3$^{c}$ | 8.5 | 5,511 | 5.6$^{c}$ | -9.9 | (D) | (D) | (D) |
| Durable goods | 122,239 | 9.0$^{c}$ | -6.9 | 1,287 | 1.3$^{c}$ | -32.6 | (D) | (D) | (D) |
| Transportation and public utilities | 43,936 | 3.2$^{c}$ | .9 | 9,748 | 9.9$^{c}$ | 18.4 | 38,380 | 31.6$^{c}$ | 1.6 |
| Wholesale trade | 46,025 | 3.4$^{c}$ | 7.0 | 4,170 | 4.2$^{c}$ | -26.1 | 669 | .6$^{c}$ | -47.3 |
| Retail trade | 104,466 | 7.7$^{c}$ | 6.9 | 8,393 | 8.5$^{c}$ | -6.6 | 3,335 | 2.7$^{c}$ | 3.1 |
| Finance, insurance, and real estate | 26,179 | 1.9$^{c}$ | 17.1 | 1,738 | 1.8$^{c}$ | -8.2 | 716 | .6$^{c}$ | 3.2 |
| Services | 182,422 | 13.5$^{c}$ | 8.2 | 13,518 | 13.7$^{c}$ | 3.5 | 6,720 | 5.5$^{c}$ | 9.6 |
| Government | 659,481 | 48.6$^{c}$ | 2.0 | 21,442 | 21.7$^{c}$ | 7.4 | 13,116 | 10.8$^{c}$ | 5.1 |
| Federal, civilian | 439,800 | 32.4$^{c}$ | 1.1 | 5,164 | 5.2$^{c}$ | -1.9 | 1,237 | 1.0$^{c}$ | -2.2 |
| Military | 112,451 | 8.3$^{c}$ | 2.6 | 565 | .6$^{c}$ | 18.7 | 459 | .4$^{c}$ | 18.6 |
| State and local | 107,230 | 7.9$^{c}$ | 5.1 | 15,713 | 15.9$^{c}$ | 10.5 | 11,420 | 9.4$^{c}$ | 5.4 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

## Table 1 (continued)
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | Garfield | | | Grand | | | Iron | | |
|---|---|---|---|---|---|---|---|---|---|
| | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| **Income by Place of Residence** | | | | | | | | | |
| Total personal income | 40,240 | 100.0[a] | 8.8 | 77,191 | 100.0[a] | -.5 | 160,857 | 100.0[a] | 4.1 |
| Per capita personal income (dollars) | 9,819 | 67.1[b] | 6.7 | 10,906 | 74.5[b] | 3.2 | 8,138 | 55.6[b] | 4.1 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 25,924 | 100.0[c] | 10.6 | 44,831 | 100.0[c] | -3.5 | 113,765 | 100.0 | 2.1 |
| Less: Contributions for social insurance | 1,425 | 5.5[c] | 9.5 | 2,606 | 5.8[c] | -4.3 | 6,474 | 5.7 | .0 |
| Plus: Residence adjustment | 1,538 | | 8.8 | 9,091 | | -6.3 | 508 | | (D) |
| Equals: Net earnings by place of residence | 26,037 | 64.7[a] | 10.5 | 51,316 | 66.5[a] | -4.0 | 107,799 | 67.0[a] | 3.0 |
| Plus: Dividends, interest, and rent | 6,545 | 16.3[a] | 4.3 | 12,001 | 15.5[a] | 6.3 | 24,684 | 15.3[a] | 5.0 |
| Plus: Transfer payments | 7,658 | 19.0[a] | 7.1 | 13,874 | 18.0[a] | 7.8 | 28,374 | 17.6[a] | 7.2 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 19,463 | 75.1[c] | 9.6 | 30,469 | 68.0[c] | -7.3 | 87,716 | 77.1[c] | -.2 |
| Other labor income | 1,734 | 6.7[c] | 8.0 | 2,700 | 6.0[c] | -8.7 | 7,812 | 6.9[c] | -1.5 |
| Proprietor's income | 4,727 | 18.2[c] | 16.0 | 11,662 | 26.0[c] | 9.5 | 18,237 | 16.0[c] | 17.4 |
| Farm | 2,182 | 8.4[c] | 23.1 | 143 | .3[c] | (U) | 2,877 | 2.5[c] | 153.3 |
| Nonfarm | 2,545 | 9.8[c] | 10.5 | 11,519 | 25.7[c] | 8.3 | 15,360 | 13.5[c] | 6.7 |
| Earnings by industry | | | | | | | | | |
| Farm | 2,606 | 10.1[c] | 18.9 | 431 | 1.0[c] | 42.7 | 4,570 | 4.0[c] | 62.6 |
| Nonfarm | 23,318 | 89.9[c] | 9.7 | 44,400 | 99.0[c] | -3.8 | 109,195 | 96.0[c] | .5 |
| Private | 15,827 | 61.1[c] | 13.1 | 34,583 | 77.1[c] | -5.2 | 76,493 | 67.2[c] | -2.4 |
| Agricultural services and other | (L) | (L) | (L) | 69 | .2[c] | .0 | (D) | (D) | (D) |
| Mining | 598 | 2.3[c] | -48.4 | 5,679 | 12.7[c] | -36.2 | (D) | (D) | (D) |
| Construction | 2,146 | 8.3[c] | 86.0 | 5,500 | 12.3[c] | 44.4 | 9,423 | 8.3[c] | -2.6 |
| Manufacturing | 4,377 | 16.9[c] | 5.4 | 832 | 1.9[c] | -17.0 | 6,749 | 5.9[c] | -10.0 |
| Nondurable goods | (D) | (D) | (D) | 450 | 1.0[c] | -12.0 | 3,634 | 3.2[c] | 9.3 |
| Durable goods | (D) | (D) | (D) | 382 | .9[c] | -22.3 | 3,115 | 2.7[c] | -25.4 |
| Transportation and public utilities | 1,699 | 6.6[c] | 56.3 | 4,481 | 10.0[c] | -7.6 | 8,065 | 7.1[c] | -2.8 |
| Wholesale trade | (L) | (L) | (L) | 1,437 | 3.2[c] | -11.8 | 3,427 | 3.0[c] | -11.5 |
| Retail trade | 1,656 | 6.4[c] | .2 | 5,205 | 11.6[c] | .0 | 17,536 | 15.4[c] | 2.2 |
| Finance, insurance, and real estate | 462 | 1.8[c] | 7.9 | 1,326 | 3.0[c] | 5.7 | 5,715 | 5.0[c] | -4.3 |
| Services | 4,860 | 18.7[c] | 12.1 | 10,054 | 22.4[c] | 3.0 | 20,864 | 18.3[c] | 2.2 |
| Government | 7,491 | 28.9[c] | 3.2 | 9,817 | 21.9[c] | 1.3 | 32,702 | 28.7[c] | 8.4 |
| Federal, civilian | 3,065 | 11.8[c] | 8.6 | 3,862 | 8.6[c] | -3.4 | 7,688 | 6.8[c] | 9.6 |
| Military | 151 | .6[c] | 18.9 | 268 | .6[c] | 18.6 | 725 | .6[c] | 18.7 |
| State and local | 4,275 | 16.5[c] | -.6 | 5,687 | 12.7[c] | 4.1 | 24,289 | 21.4[c] | 7.7 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

## Table 1 (continued)
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | Juab | | | Kane | | | Millard | | |
|---|---|---|---|---|---|---|---|---|---|
| | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| **Income by Place of Residence** | | | | | | | | | |
| Total personal income | 48,390 | 100.0$^{a}$ | 1.2 | 46,721 | 100.0$^{a}$ | 7.9 | 136,878 | 100.0$^{a}$ | -10.3 |
| Per capita personal income (dollars) | 8,196 | 56.0$^{b}$ | 4.2 | 9,780 | 66.8$^{b}$ | 4.3 | 9,624 | 65.8$^{b}$ | -9.2 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 25,924 | 100.0$^{c}$ | -2.1 | 22,089 | 100.0$^{c}$ | 10.3 | 122,837 | 100.0$^{c}$ | -20.7 |
| Less: Contributions for social insurance | 1,446 | 5.6$^{c}$ | -5.7 | 1,314 | 5.9$^{c}$ | 9.6 | 6,942 | 5.7$^{c}$ | -23.4 |
| Plus: Residence adjustment | 5,574 | | 1.6 | 9,541 | | 7.4 | -14,108 | | (U) |
| Equals: Net earnings by place of residence | 30,052 | 62.1$^{a}$ | -1.2 | 30,316 | 64.9$^{a}$ | 9.4 | 101,787 | 74.4$^{a}$ | -14.5 |
| Plus: Dividends, interest, and rent | 7,521 | 15.5$^{a}$ | 4.9 | 8,327 | 17.8$^{a}$ | 4.4 | 18,740 | 13.7$^{a}$ | 4.1 |
| Plus: Transfer payments | 10,817 | 22.4$^{a}$ | 6.3 | 8,078 | 17.3$^{a}$ | 5.9 | 16,351 | 11.9$^{a}$ | 4.3 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 17,338 | 66.9$^{c}$ | -8.0 | 16,446 | 74.5$^{c}$ | 11.2 | 97,728 | 79.6$^{c}$ | -25.4 |
| Other labor income | 1,431 | 5.5$^{c}$ | -12.2 | 1,153 | 5.2$^{c}$ | 10.2 | 10,999 | 9.0$^{c}$ | -22.7 |
| Proprietor's income | 7,155 | 27.6$^{c}$ | 19.1 | 4,490 | 20.3$^{c}$ | 7.1 | 14,110 | 11.5$^{c}$ | 48.2 |
| Farm | 2,240 | 8.6$^{c}$ | 67.9 | 531 | 2.4$^{c}$ | 11.6 | 4,082 | 3.3$^{c}$ | 206.2 |
| Nonfarm | 4,915 | 19.0$^{c}$ | 5.2 | 3,959 | 17.9$^{c}$ | 6.5 | 10,028 | 8.2$^{c}$ | 7.3 |
| Earnings by industry | | | | | | | | | |
| Farm | 2,889 | 11.1$^{c}$ | 46.1 | 841 | 3.8$^{c}$ | 7.4 | 6,948 | 5.7$^{c}$ | 130.3 |
| Nonfarm | 23,035 | 88.9$^{c}$ | -6.0 | 21,248 | 96.2$^{c}$ | 10.4 | 115,889 | 94.3$^{c}$ | -23.7 |
| Private | 16,973 | 65.5$^{c}$ | -7.7 | 15,380 | 69.6$^{c}$ | 9.7 | 101,789 | 82.9$^{c}$ | -26.3 |
| Agricultural services and other | (L) | (L) | (L) | (L) | (L) | (L) | 548 | .4$^{c}$ | 4.6 |
| Mining | 1,124 | 4.3$^{c}$ | -60.5 | 139 | .6$^{c}$ | -23.5 | 4,493 | 3.7$^{c}$ | -27.3 |
| Construction | 1,348 | 5.2$^{c}$ | -48.7 | 1,437 | 6.5$^{c}$ | 10.5 | 45,717 | 37.2$^{c}$ | -45.9 |
| Manufacturing | 2,686 | 10.4$^{c}$ | 58.3 | 816 | 3.7$^{c}$ | 17.1 | 6,761 | 5.5$^{c}$ | -18.1 |
| Nondurable goods | (D) | (D) | (D) | 217 | 1.0$^{c}$ | -28.8 | 1,388 | 1.1$^{c}$ | -33.7 |
| Durable goods | (D) | (D) | (D) | 599 | 2.7$^{c}$ | 52.8 | 5,373 | 4.4$^{c}$ | -12.8 |
| Transportation and public utilities | 748 | 2.9$^{c}$ | -10.5 | 730 | 3.3$^{c}$ | 20.5 | (D) | (D) | (D) |
| Wholesale trade | 1,949 | 7.5$^{c}$ | -1.2 | 1,180 | 5.3$^{c}$ | 6.1 | 1,390 | 1.1$^{c}$ | -17.8 |
| Retail trade | 4,051 | 15.6$^{c}$ | 2.4 | 3,903 | 17.7$^{c}$ | 9.3 | 7,913 | 6.4$^{c}$ | -7.1 |
| Finance, insurance, and real estate | 706 | 2.7$^{c}$ | -6.3 | 576 | 2.6$^{c}$ | 22.0 | 1,838 | 1.5$^{c}$ | 8.6 |
| Services | 4,338 | 16.7$^{c}$ | 18.0 | 6,576 | 29.8$^{c}$ | 8.6 | (D) | (D) | (D) |
| Government | 6,062 | 23.4$^{c}$ | -1.0 | 5,868 | 26.6$^{c}$ | 12.2 | 14,100 | 11.5$^{c}$ | 2.8 |
| Federal, civilian | 499 | 1.9$^{c}$ | 6.6 | 1,436 | 6.5$^{c}$ | 8.8 | 2,189 | 1.8$^{c}$ | -2.7 |
| Military | 222 | .9$^{c}$ | 18.7 | 173 | .8$^{c}$ | 18.5 | 533 | .4$^{c}$ | 18.7 |
| State and local | 5,341 | 20.6$^{c}$ | -2.4 | 4,259 | 19.3$^{c}$ | 13.2 | 11,378 | 9.3$^{c}$ | 3.3 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

## Table 1 (continued)
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | Morgan | | | Piute | | | Rich | | |
|---|---|---|---|---|---|---|---|---|---|
| **Income by Place of Residence** | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| Total personal income | 60,272 | 100.0[a] | 3.5 | 11,017 | 100.0[a] | 6.7 | 19,569 | 100.0[a] | -3.9 |
| Per capita personal income (dollars) | 11,544 | 78.9[b] | 1.4 | 7,325 | 50.1[b] | 2.8 | 8,647 | 59.1[b] | 1.0 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 25,916 | 100.0[c] | 2.0 | 4,300 | 100.0[c] | 13.3 | 6,418 | 100.0[c] | 6.6 |
| Less: Contributions for social insurance | 1,318 | 5.1[c] | .0 | 195 | 4.5[c] | -2.4 | 319 | 5.0[c] | .3 |
| Plus: Residence adjustment | 20,293 | | 4.6 | 1,562 | | -3.0 | 5,851 | | 21.2 |
| Equals: Net earnings by place of residence | 44,891 | 74.5[a] | 3.2 | 5,667 | 51.4[a] | 8.8 | 11,950 | 61.1[a] | 9.0 |
| Plus: Dividends, interest, and rent | 6,995 | 11.6[a] | 5.1 | 2,178 | 19.8[a] | 4.2 | 4,821 | 24.6[a] | 4.9 |
| Plus: Transfer payments | 8,386 | 13.9[a] | 4.0 | 3,172 | 28.8[a] | 4.9 | 2,798 | 14.3[a] | 5.6 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 17,911 | 69.1[c] | -1.5 | 2,218 | 51.6[c] | -3.8 | 5,007 | 78.0[c] | -.3 |
| Other labor income | 1,607 | 6.2[c] | -1.6 | 155 | 3.6[c] | -4.2 | 388 | 6.0[c] | .8 |
| Proprietor's income | 6,398 | 24.7[c] | 14.5 | 1,927 | 44.8[c] | 45.3 | 1,023 | 15.9[c] | 67.7 |
| Farm | 2,955 | 11.4[c] | 22.3 | 1,295 | 30.1[c] | 72.0 | 224 | 3.5[c] | (U) |
| Nonfarm | 3,443 | 13.3[c] | 8.5 | 632 | 14.7[c] | 10.3 | 799 | 12.4[c] | 16.8 |
| Earnings by industry | | | | | | | | | |
| Farm | 4,415 | 17.0[c] | 14.3 | 1,522 | 35.4[c] | 55.6 | 1,364 | 21.3[c] | 29.4 |
| Nonfarm | 21,501 | 83.0[c] | -.2 | 2,778 | 64.6[c] | -1.3 | 5,054 | 78.7[c] | 1.8 |
| Private | 17,442 | 67.3[c] | .8 | 1,322 | 30.7[c] | 3.1 | 2,617 | 40.8[c] | 1.7 |
| Agricultural services and other | (L) | (L) | (L) | (L) | (L) | (L) | 85 | 1.3[c] | 6.3 |
| Mining | (L) | (L) | (L) | (L) | (L) | (L) | (D) | (D) | (D) |
| Construction | 2,258 | 8.7[c] | 17.5 | 276 | 6.4[c] | (U) | 314 | 4.9[c] | 3.0 |
| Manufacturing | 6,234 | 24.1[c] | 1.1 | 173 | 4.0[c] | -5.9 | 275 | 4.3[c] | 3.8 |
| Nondurable goods | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) |
| Durable goods | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) |
| Transportation and public utilities | 457 | 1.8[c] | (U) | 175 | 4.1[c] | 68.3 | 395 | 6.2[c] | -7.2 |
| Wholesale trade | 4,116 | 15.9[c] | -1.0 | 57 | 1.3[c] | (U) | (D) | (D) | (D) |
| Retail trade | 1,499 | 5.8[c] | 7.5 | 76 | 1.8[c] | -26.1 | 451 | 7.0[c] | -16.1 |
| Finance, insurance, and real estate | 523 | 2.0[c] | 16.7 | 81 | 1.9[c] | 17.4 | (D) | (D) | (D) |
| Services | 2,258 | 8.7[c] | -3.9 | 442 | 10.3[c] | (U) | 618 | 9.6[c] | 22.6 |
| Government | 4,059 | 15.7[c] | -4.6 | 1,456 | 33.9[c] | -5.1 | 2,437 | 38.0[c] | 1.8 |
| Federal, civilian | 218 | .8[c] | -3.0 | 129 | 3.0[c] | .8 | 295 | 4.6[c] | -4.4 |
| Military | 194 | .7[c] | 19.0 | 57 | 1.3[c] | (U) | 87 | 1.4[c] | 17.6 |
| State and local | 3,647 | 14.1[c] | -5.6 | 1,270 | 29.5[c] | -6.5 | 2,055 | 32.0[c] | 2.2 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

## Table 1 (continued)
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | Salt Lake | | | San Juan | | | Sanpete | | |
|---|---|---|---|---|---|---|---|---|---|
| | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| **Income by Place of Residence** | | | | | | | | | |
| Total personal income | 8,650,607 | 100.0[a] | 4.4 | 80,847 | 100.0[a] | 5.4 | 138,689 | 100.0[a] | 7.4 |
| Per capita personal income (dollars) | 12,314 | 84.2[b] | 2.9 | 7,134 | 48.8[b] | 8.0 | 8,334 | 57.0[b] | 7.6 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 7,433,169 | 100.0[c] | 3.6 | 57,573 | 100.0[c] | 4.0 | 72,133 | 100.0[c] | 7.7 |
| Less: Contributions for social insurance | 446,199 | 6.0[c] | 4.2 | 3,149 | 5.5[c] | 1.6 | 3,596 | 5.0[c] | -.1 |
| Plus: Residence adjustment | -585,307 | | (U) | -4,009 | | (U) | 22,503 | | 8.8 |
| Equals: Net earnings by place of residence | 6,401,663 | 74.0[a] | 3.9 | 50,415 | 62.4[a] | 4.5 | 91,040 | 65.6[a] | 8.3 |
| Plus: Dividends, interest, and rent | 1,213,014 | 14.0[a] | 5.1 | 10,722 | 13.3[a] | 5.4 | 19,640 | 14.2[a] | 4.9 |
| Plus: Transfer payments | 1,035,930 | 12.0[a] | 6.4 | 19,710 | 24.4[a] | 8.0 | 28,009 | 20.2[a] | 6.3 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 6,264,367 | 84.3[c] | 3.3 | 45,076 | 78.3[c] | 2.5 | 46,342 | 64.2[c] | -.6 |
| Other labor income | 586,601 | 7.9[c] | 1.7 | 4,152 | 7.2[c] | 5.4 | 4,467 | 6.2[c] | -2.6 |
| Proprietor's income | 582,201 | 7.8[c] | 8.7 | 8,345 | 14.5[c] | 12.4 | 21,324 | 29.6[c] | 36.0 |
| Farm | 5,999 | .1[c] | 64.9 | 2,973 | 5.2[c] | 40.8 | 10,693 | 14.8[c] | 85.3 |
| Nonfarm | 576,202 | 7.8[c] | 8.4 | 5,372 | 9.3[c] | 1.1 | 10,631 | 14.7[c] | 7.3 |
| Earnings by industry | | | | | | | | | |
| Farm | 10,147 | .1[c] | 31.0 | 3,766 | 6.5[c] | 30.1 | 14,102 | 19.5[c] | 54.1 |
| Nonfarm | 7,423,022 | 99.9[c] | 3.5 | 53,807 | 93.5[c] | 2.6 | 58,031 | 80.4[c] | .4 |
| Private | 6,237,109 | 83.9[c] | 2.9 | 36,427 | 63.3[c] | -.3 | 38,581 | 53.5[c] | -1.0 |
| Agricultural services and other | 18,044 | .2[c] | -21.7 | 90 | .2[c] | 11.1 | 569 | .8[c] | 7.2 |
| Mining | 91,514 | 1.2[c] | -20.1 | 11,568 | 20.1[c] | 6.6 | 281 | .4[c] | -39.6 |
| Construction | 520,114 | 7.0[c] | -3.2 | 4,285 | 7.4[c] | -19.3 | 5,759 | 8.0[c] | 8.0 |
| Manufacturing | 1,175,369 | 15.8[c] | -.8 | 1,769 | 3.1[c] | 2.1 | 11,169 | 15.5[c] | -13.0 |
| Nondurable goods | 263,757 | 3.5[c] | 5.5 | 1,026 | 1.8[c] | -.7 | 8,378 | 11.6[c] | 7.2 |
| Durable goods | 911,612 | 12.3[c] | -2.5 | 743 | 1.3[c] | 6.4 | 2,791 | 3.9[c] | -44.5 |
| Transportation and public utilities | 796,297 | 10.7[c] | .6 | 2,714 | 4.7[c] | .6 | 3,399 | 4.7[c] | 9.1 |
| Wholesale trade | 710,759 | 9.6[c] | 2.9 | (D) | (D) | (D) | 697 | 1.0[c] | -9.5 |
| Retail trade | 781,010 | 10.5[c] | 4.7 | 3,901 | 6.8[c] | 5.6 | 6,020 | 8.3[c] | 6.5 |
| Finance, insurance, and real estate | 581,586 | 7.8[c] | 11.7 | (D) | (D) | (D) | 2,009 | 2.8[c] | 8.0 |
| Services | 1,562,416 | 21.0[c] | 7.6 | 10,529 | 18.3[c] | .8 | 8,678 | 12.0[c] | 3.1 |
| Government | 1,185,913 | 16.0[c] | 7.0 | 17,380 | 30.2[c] | 9.4 | 19,450 | 27.0[c] | 3.5 |
| Federal, civilian | 206,834 | 2.8[c] | .5 | 3,392 | 5.9[c] | 5.9 | 2,002 | 2.8[c] | -2.7 |
| Military | 40,619 | .5[c] | 9.6 | 421 | .7[c] | 18.9 | 617 | .9[c] | 18.9 |
| State and local | 938,460 | 12.6[c] | 8.4 | 13,567 | 23.6[c] | 10.0 | 16,831 | 23.3[c] | 3.8 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

## Table 1 (continued)
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | Sevier | | | Summit | | | Tooele | | |
|---|---|---|---|---|---|---|---|---|---|
| | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| **Income by Place of Residence** | | | | | | | | | |
| Total personal income | 153,216 | 100.0$^{a}$ | 5.0 | 194,495 | 100.0$^{a}$ | 3.5 | 323,762 | 100.0$^{a}$ | .8 |
| Per capita personal income (dollars) | 9,832 | 67.2$^{b}$ | 5.8 | 15,041 | 102.8$^{b}$ | -.3 | 11,087 | 75.8$^{b}$ | 1.0 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 104,200 | 100.0$^{c}$ | 4.5 | 112,660 | 100.0$^{c}$ | 1.9 | 274,390 | 100.0$^{c}$ | 1.7 |
| Less: Contributions for social insurance | 6,046 | 5.8$^{c}$ | 2.4 | 6,369 | 5.7$^{c}$ | .8 | 15,336 | 5.6$^{c}$ | .8 |
| Plus: Residence adjustment | 1,963 | | 33.0 | 45,315 | | 5.4 | -12,508 | | (U) |
| Equals: Net earnings by place of residence | 100,117 | 65.3$^{a}$ | 5.1 | 151,606 | 77.9$^{a}$ | 3.0 | 246,546 | 76.2$^{a}$ | .3 |
| Plus: Dividends, interest, and rent | 24,277 | 15.8$^{a}$ | 4.2 | 28,476 | 14.6$^{a}$ | 4.9 | 25,145 | 7.8$^{a}$ | 5.8 |
| Plus: Transfer payments | 28,822 | 18.8$^{a}$ | 5.3 | 14,413 | 7.4$^{a}$ | 7.2 | 52,071 | 16.1$^{a}$ | 4.9 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 76,934 | 73.8$^{c}$ | 2.1 | 84,148 | 74.7$^{c}$ | -.3 | 242,767 | 88.5$^{c}$ | 1.7 |
| Other labor income | 8,044 | 7.7$^{c}$ | .1 | 6,070 | 5.4$^{c}$ | -4.3 | 16,661 | 6.1$^{c}$ | -8.3 |
| Proprietor's income | 19,222 | 18.4$^{c}$ | 17.9 | 22,442 | 19.9$^{c}$ | 13.7 | 14,962 | 5.5$^{c}$ | 14.8 |
| Farm | 1,971 | 1.9$^{c}$ | (U) | 4,811 | 4.3$^{c}$ | 38.1 | 2,830 | 1.0$^{c}$ | 82.7 |
| Nonfarm | 17,251 | 16.6$^{c}$ | 5.1 | 17,631 | 15.6$^{c}$ | 8.5 | 12,132 | 4.4$^{c}$ | 5.7 |
| Earnings by industry | | | | | | | | | |
| Farm | 3,716 | 3.6$^{c}$ | 128.3 | 6,241 | 5.5$^{c}$ | 27.2 | 3,879 | 1.4$^{c}$ | 50.0 |
| Nonfarm | 100,484 | 96.4$^{c}$ | 2.4 | 106,419 | 94.5$^{c}$ | .7 | 270,511 | 98.6$^{c}$ | 1.2 |
| Private | 78,527 | 75.4$^{c}$ | 1.4 | 90,150 | 80.0$^{c}$ | -1.0 | 96,854 | 35.3$^{c}$ | -5.9 |
| Agricultural services and other | 158 | .2$^{c}$ | 6.8 | 850 | .8$^{c}$ | 11.0 | 414 | .2$^{c}$ | 7.3 |
| Mining | 11,544 | 11.1$^{c}$ | -13.1 | 4,024 | 3.6$^{c}$ | -42.1 | 11,051 | 4.0$^{c}$ | -13.8 |
| Construction | 5,464 | 5.2$^{c}$ | -7.5 | 8,849 | 7.9$^{c}$ | -13.9 | 7,408 | 2.7$^{c}$ | -9.0 |
| Manufacturing | 9,429 | 9.0$^{c}$ | -3.6 | 3,313 | 2.9$^{c}$ | -10.0 | 31,335 | 11.4$^{c}$ | -16.3 |
| Nondurable goods | 1,283 | 1.2$^{c}$ | -43.0 | 517 | .5$^{c}$ | -32.2 | 28,848 | 10.5$^{c}$ | -16.6 |
| Durable goods | 8,146 | 7.8$^{c}$ | 8.0 | 2,796 | 2.5$^{c}$ | -4.2 | 2,487 | .9$^{c}$ | -13.8 |
| Transportation and public utilities | 18,875 | 18.1$^{c}$ | 14.1 | 7,101 | 6.3$^{c}$ | .6 | 8,168 | 3.0$^{c}$ | -2.1 |
| Wholesale trade | 3,785 | 3.6$^{c}$ | .5 | 1,686 | 1.5$^{c}$ | -3.6 | 690 | .3$^{c}$ | 3.9 |
| Retail trade | 11,734 | 11.3$^{c}$ | 2.3 | 15,511 | 13.8$^{c}$ | 7.4 | 12,403 | 4.5$^{c}$ | 7.3 |
| Finance, insurance, and real estate | 3,308 | 3.2$^{c}$ | 6.7 | 10,384 | 9.2$^{c}$ | 3.8 | 2,635 | 1.0$^{c}$ | 7.1 |
| Services | 14,230 | 13.7$^{c}$ | 6.3 | 38,432 | 34.1$^{c}$ | 6.3 | 22,750 | 8.3$^{c}$ | 7.4 |
| Government | 21,957 | 21.1$^{c}$ | 6.3 | 16,269 | 14.4$^{c}$ | 11.6 | 173,657 | 63.3$^{c}$ | 5.8 |
| Federal, civilian | 5,474 | 5.3$^{c}$ | -.8 | 1,263 | 1.1$^{c}$ | .0 | 144,823 | 52.8$^{c}$ | 6.1 |
| Military | 588 | .6$^{c}$ | 18.5 | 476 | .4$^{c}$ | 18.4 | 10,013 | 3.6$^{c}$ | .9 |
| State and local | 15,895 | 15.3$^{c}$ | 8.6 | 14,530 | 12.9$^{c}$ | 12.5 | 18,821 | 6.9$^{c}$ | 6.5 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

## Table 1 (continued)
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | Uintah | | | Utah | | | Wasatch | | |
|---|---|---|---|---|---|---|---|---|---|
| | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| **Income by Place of Residence** | | | | | | | | | |
| Total personal income | 222,556 | 100.0[a] | -4.2 | 2,051,222 | 100.0[a] | 4.2 | 93,632 | 100.0[a] | .3 |
| Per capita personal income (dollars) | 9,193 | 62.8[b] | -.7 | 8,528 | 58.3[b] | 4.0 | 9,565 | 65.4[b] | -.5 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 173,519 | 100.0[c] | -11.6 | 1,416,515 | 100.0[c] | 4.9 | 37,096 | 100.0[c] | 2.9 |
| Less: Contributions for social insurance | 9,865 | 5.7[c] | -13.0 | 83,425 | 5.9[c] | 5.0 | 2,085 | 5.5[c] | .7 |
| Plus: Residence adjustment | 6,320 | | (U) | 162,711 | | -6.5 | 30,966 | | -6.8 |
| Equals: Net earnings by place of residence | 169,974 | 76.4[a] | -7.2 | 1,495,801 | 72.9[a] | 3.5 | 65,977 | 70.5[a] | -1.8 |
| Plus: Dividends, interest, and rent | 25,868 | 11.6[a] | 5.5 | 257,208 | 12.5[a] | 5.4 | 13,610 | 14.5[a] | 5.0 |
| Plus: Transfer payments | 26,714 | 12.0[a] | 8.4 | 298,213 | 14.5[a] | 6.7 | 14,045 | 15.0[a] | 7.1 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 127,115 | 73.3[c] | -15.7 | 1,112,387 | 78.5[c] | 4.4 | 25,274 | 68.1[c] | .1 |
| Other labor income | 11,029 | 6.4[c] | -15.8 | 104,202 | 7.4[c] | .1 | 1,919 | 5.2[c] | -3.1 |
| Proprietor's income | 35,375 | 20.4[c] | 8.7 | 199,926 | 14.1[c] | 9.9 | 9,903 | 26.7[c] | 12.1 |
| Farm | 4,613 | 2.7[c] | 24.9 | 12,834 | .9[c] | 37.5 | 1,319 | 3.6[c] | 51.1 |
| Nonfarm | 30,762 | 17.7[c] | 6.6 | 187,092 | 13.2[c] | 8.4 | 8,584 | 23.1[c] | 7.8 |
| Earnings by industry | | | | | | | | | |
| Farm | 5,566 | 3.2[c] | 20.0 | 20,182 | 1.4[c] | 21.5 | 2,393 | 6.5[c] | 23.3 |
| Nonfarm | 167,953 | 96.8[c] | -12.4 | 1,396,333 | 98.6[c] | 4.6 | 34,703 | 93.5[c] | 1.7 |
| Private | 138,103 | 79.6[c] | -16.2 | 1,149,547 | 81.2[c] | 3.6 | 23,164 | 62.4[c] | .4 |
| Agricultural services and other | 378 | .2[c] | -41.8 | 3,835 | .3[c] | 6.1 | 234 | .6[c] | 46.2 |
| Mining | 35,599 | 20.5[c] | -18.5 | 2,585 | .2[c] | -32.7 | 89 | .2[c] | -63.0 |
| Construction | 15,448 | 8.9[c] | -44.8 | 102,257 | 7.2[c] | -1.1 | 4,353 | 11.7[c] | 9.2 |
| Manufacturing | 3,500 | 2.0[c] | -3.9 | 258,831 | 18.3[c] | -6.8 | 858 | 2.3[c] | -54.7 |
| Nondurable goods | 999 | .6[c] | -.3 | 44,798 | 3.2[c] | 10.1 | 284 | .8[c] | 2.5 |
| Durable goods | 2,501 | 1.4[c] | -5.3 | 214,033 | 15.1[c] | -9.7 | 574 | 1.5[c] | -64.5 |
| Transportation and public utilities | 21,186 | 12.2[c] | 15.6 | 68,623 | 4.8[c] | 4.7 | 2,127 | 5.7[c] | 1.7 |
| Wholesale trade | 9,123 | 5.3[c] | -14.7 | 37,390 | 2.6[c] | 16.6 | 2,551 | 6.9[c] | 20.0 |
| Retail trade | 16,015 | 9.2[c] | -12.4 | 143,321 | 10.1[c] | 5.9 | 5,257 | 14.2[c] | .2 |
| Finance, insurance, and real estate | 2,422 | 1.4[c] | -.9 | 47,432 | 3.3[c] | 8.3 | 1,036 | 2.8[c] | 5.2 |
| Services | 34,432 | 19.8[c] | -12.1 | 485,273 | 34.3[c] | 9.3 | 6,659 | 18.0[c] | 5.0 |
| Government | 29,850 | 17.2[c] | 11.1 | 246,786 | 17.4[c] | 9.9 | 11,539 | 31.1[c] | 4.4 |
| Federal, civilian | 8,891 | 5.1[c] | .2 | 19,757 | 1.4[c] | 1.3 | 1,350 | 3.5[c] | -3.1 |
| Military | 935 | .5[c] | 18.7 | 9,668 | .7[c] | 15.8 | 354 | 1.0[c] | 18.4 |
| State and local | 20,024 | 11.5[c] | 16.3 | 217,361 | 15.3[c] | 10.6 | 9,835 | 26.5[c] | 5.1 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

## Table 1 (continued)
## Personal Income and Earnings in Utah Counties by Type and Industrial Source, 1986

| | Washington | | | Wayne | | | Weber | | |
|---|---|---|---|---|---|---|---|---|---|
| | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 | Income/ Earnings ($1,000) | Components as Percent of Totals | Percent Change 1985-86 |
| **Income by Place of Residence** | | | | | | | | | |
| Total personal income | 337,056 | 100.0[a] | 9.4 | 18,135 | 100.0[a] | 5.5 | 1,924,355 | 100.0[a] | 4.2 |
| Per capita personal income (dollars) | 8,725 | 59.6[b] | -.1 | 8,607 | 58.8[b] | 6.9 | 12,122 | 82.9[b] | 3.3 |
| Derivation of total personal income: | | | | | | | | | |
| Total earnings by place of work | 198,323 | 100.0[c] | 12.8 | 9,875 | 100.0[c] | 2.6 | 1,207,370 | 100.0[c] | 6.4 |
| Less: Contributions for social insurance | 12,032 | 6.1[c] | 12.0 | 513 | 5.2[c] | -3.7 | 72,748 | 6.0[c] | 6.4 |
| Plus: Residence adjustment | 11,738 | | -.5 | 1,430 | | 25.0 | 183,046 | | 10.7 |
| Equals: Net earnings by place of residence | 198,029 | 58.8[a] | 11.9 | 10,792 | 59.5[a] | 5.4 | 1,317,668 | 68.5[a] | 3.6 |
| Plus: Dividends, interest, and rent | 70,357 | 20.9[a] | 4.3 | 3,475 | 19.2[a] | 4.3 | 254,258 | 13.2[a] | 5.1 |
| Plus: Transfer payments | 68,670 | 20.4[a] | 7.9 | 3,868 | 21.3[a] | 6.7 | 352,429 | 18.3[a] | 5.8 |
| **Earnings by Place of Work** | | | | | | | | | |
| Components of earnings | | | | | | | | | |
| Wage and salary disbursements | 146,222 | 73.7[c] | 13.4 | 6,475 | 65.6[c] | -3.2 | 1,002,721 | 83.1[c] | 5.8 |
| Other labor income | 12,739 | 6.4[c] | 13.6 | 540 | 5.5[c] | -3.3 | 92,254 | 7.6[c] | 6.3 |
| Proprietor's income | 39,362 | 19.8[c] | 10.3 | 2,860 | 29.0[c] | 20.5 | 112,395 | 9.3[c] | 11.3 |
| Farm | 2,156 | 1.1[c] | 43.6 | 1,252 | 12.7[c] | 70.3 | 4,114 | .3[c] | 219.9 |
| Nonfarm | 37,206 | 18.8[c] | 8.8 | 1,608 | 16.3[c] | -1.8 | 108,281 | 9.0[c] | 8.6 |
| Earnings by industry | | | | | | | | | |
| Farm | 2,704 | 1.4[c] | 32.3 | 1,499 | 15.2[c] | 52.8 | 6,134 | .5[c] | 86.2 |
| Nonfarm | 195,619 | 98.6[c] | 12.5 | 8,376 | 84.8[c] | -3.0 | 1,201,236 | 99.5[c] | 6.1 |
| Private | 158,551 | 79.9[c] | 13.1 | 4,453 | 45.1[c] | -9.1 | 888,203 | 73.6[c] | 6.8 |
| Agricultural services and other | 2,024 | 1.0[c] | 13.8 | (L) | (L) | (L) | 2,929 | .2[c] | 10.9 |
| Mining | 2,482 | 1.3[c] | 29.1 | (D) | (D) | (D) | 4,981 | .4[c] | -5.8 |
| Construction | 27,172 | 13.7[c] | 8.7 | 1,956 | 19.8[c] | -7.9 | 73,100 | 6.1[c] | -1.1 |
| Manufacturing | 16,678 | 8.4[c] | 7.9 | 444 | 4.5[c] | 82.0 | 245,826 | 20.4[c] | 12.3 |
| Nondurable goods | 10,918 | 5.5[c] | 8.2 | (D) | (D) | (D) | 77,155 | 6.4[c] | 13.7 |
| Durable goods | 5,760 | 2.9[c] | 7.3 | (D) | (D) | (D) | 168,671 | 14.0[c] | 11.7 |
| Transportation and public utilities | 14,469 | 7.3[c] | 15.9 | 323 | 3.3[c] | -3.5 | 82,678 | 6.8[c] | -4.2 |
| Wholesale trade | 7,630 | 3.8[c] | 13.2 | 355 | 3.6[c] | -7.7 | 38,308 | 3.2[c] | .9 |
| Retail trade | 35,017 | 17.7[c] | 12.4 | 483 | 4.9[c] | 11.8 | 135,417 | 11.2[c] | 4.7 |
| Finance, insurance, and real estate | 9,039 | 4.6[c] | 10.2 | (D) | (D) | (D) | 50,317 | 4.2[c] | 15.5 |
| Services | 44,040 | 22.2[c] | 17.7 | 696 | 7.0[c] | .6 | 254,647 | 21.1[c] | 9.1 |
| Government | 37,068 | 18.7[c] | 10.2 | 3,923 | 39.7[c] | 4.7 | 313,033 | 25.9[c] | 4.2 |
| Federal, civilian | 6,342 | 3.2[c] | -4.3 | 1,989 | 20.1[c] | 7.9 | 140,051 | 11.6[c] | 1.5 |
| Military | 1,313 | .7[c] | 18.7 | 60 | .8[c] | 19.4 | 12,430 | 1.0[c] | 15.5 |
| State and local | 29,413 | 14.8[c] | 13.6 | 1,854 | 18.8[c] | 1.0 | 160,552 | 13.3[c] | 5.9 |

[a] Income components as a percent of total personal income.
[b] Per capita personal income as a percent of U.S. average.
[c] Earnings components as a percent of total earnings.

(D) Not shown to avoid disclosure of confidential information.
(L) Less than $50,000. Data included in totals.
(U) Unable to calculate due to zero or negative data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System, April 1988.

# Utah Business Statistics

| UTAH DATA | Jan 1987 | Jan 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,489 | NA | NA | NA | 18,314 | NA |
| New Corporations (no.) | 389 | 498 | 28.0% | 463 | 456 | 1.5% |
| New Car, Truck and Motorhome Sales (no.) | 3,884 | NA | NA | NA | 6,169 | -19.1% |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 57.70 | 64.50 | 11.8% | 64.09 | 55.24 | 16.0% |
| Lambs (cwt) | 72.30 | 81.00 | 12.0% | 73.06 | 67.06 | 8.9% |
| Milk Wholesale (cwt) | 12.70 | 12.10 | -4.7% | 11.89 | 11.88 | 0.1% |
| Alfalfa Hay, Baled (per ton) | 66.00 | 74.00 | 12.1% | 68.00 | 67.64 | 0.5% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 42,034 | 46,340 | 10.2% | 42,175 | 37,733 | 11.8% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 57,839 | 95,071 | 64.4% | 122,903 | 128,212 | -4.1% |
| Residential | 31,103 | 35,472 | 14.0% | 52,346 | 60,183 | -13.0% |
| Nonresidential | 23,848 | 50,701 | 112.6% | 40,370 | 48,279 | -16.4% |
| Public Works and Utilities | 2,888 | 8,898 | 208.1% | 30,187 | 20,000 | 50.9% |
| Total Permit Construction (thous. of dol.) [2] | 58,389.3 | 37,422.9 | -35.9% | 87,844.1 | 108,927.3 | -19.4% |
| Residential | 24,354.5 | 15,162.8 | -37.7% | 40,502.2 | 58,082.5 | -30.3% |
| Nonresidential | 25,863.9 | 13,912.7 | -46.2% | 33,457.4 | 37,191.7 | -10.0% |
| Additions, Alterations and Repairs | 8,170.9 | 8,347.4 | 2.2% | 13,885.4 | 13,673.7 | 1.5% |
| New Dwelling Units (no.) | 358 | 213 | -40.5% | 597 | 1,058 | -43.6% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 747.0 | 757.8 | 1.4% | 757.0 | 751.0 | 0.8% |
| Total Employed Persons | 692.3 | 707.4 | 2.2% | 709.2 | 707.4 | 0.3% |
| Unemployed Persons | 54.7 | 50.4 | -7.9% | 47.7 | 43.4 | 9.9% |
| Percent Total Labor Force | 7.3 | 6.7 | -8.2% | 6.3 | 5.8 | 9.7% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 625.3 | 635.7 | 1.7% | 641.5 | 635.6 | 0.9% |
| Manufacturing | 88.7 | 93.3 | 5.2% | 93.1 | 91.7 | 1.6% |
| Mining | 7.7 | 8.2 | 6.5% | 8.1 | 7.9 | 2.7% |
| Contract Construction | 25.0 | 20.8 | -16.8% | 26.9 | 32.4 | -16.9% |
| Transportaion, Communication and Utilities | 36.9 | 37.9 | 2.7% | 37.8 | 37.3 | 1.4% |
| Wholesale Trade | 34.5 | 34.0 | -1.4% | 35.8 | 35.9 | -0.3% |
| Retail Trade | 115.9 | 115.0 | -0.8% | 118.7 | 117.1 | 1.3% |
| Finance, Insurance and Real Estate | 33.2 | 33.4 | 0.6% | 33.8 | 33.0 | 2.4% |
| Services [3] | 141.2 | 150.8 | 6.8% | 145.7 | 138.8 | 5.0% |
| Federal Government | 39.9 | 39.4 | -1.3% | 39.8 | 40.4 | -1.6% |
| State Government [4] | 38.4 | 38.2 | -0.5% | 37.4 | 37.9 | -1.4% |
| Local Government [4] | 64.0 | 64.5 | 0.8% | 64.4 | 63.1 | 1.9% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 37.7 | 40.0 | 6.1% | 40.0 | 39.9 | 0.3% |
| Mining | 42.0 | 46.0 | 9.5% | 41.7 | 42.4 | -1.8% |
| Wholesale Trade | 37.6 | 38.4 | 2.1% | 38.7 | 37.0 | 4.6% |
| Retail Trade | 27.1 | 27.3 | 0.7% | 28.4 | 28.0 | 1.5% |
| Amount of Unemployment Compensation (thous. of dol.) | 11,166.7 | 7,744.3 | -30.6% | 7,492.9 | 8,423.1 | -11.0% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,253.4 | 2,101.7 | -6.7% | 2,440.7 | 2,381.7 | 2.5% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 61,527.3 | 83,700.0 | 36.0% | 142,270.9 | 122,828.5 | 15.8% |
| Sales and Use Tax | 11,134.2 | 19,219.2 | 72.6% | 48,275.3 | 45,407.6 | 6.3% |
| Motor Fuel Tax | 9,199.5 | 8,817.2 | -4.2% | 9,422.7 | 7,768.9 | 21.3% |
| Individual Income Tax | 29,774.6 | 41,038.6 | 37.8% | 50,325.0 | 39,233.4 | 28.3% |
| Corporation Franchise Tax | (216.1) | 2,649.9 | 1326.2% | 7,082.6 | 4,415.5 | 60.4% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,243.6 | 1,272.0 | 2.3% | 1,153.5 | 1,102.1 | 4.7% |
| Crude Oil to Refineries (thous. of bbls.) | 4,041.5 | 3,829.2 | -5.3% | 3,780.6 | 3,837.2 | -1.5% |
| Crude Oil (thous. of bbls.) | 3,196.9 | 2,923.7 | -8.5% | 2,928.3 | 3,219.6 | -9.0% |
| Natural Gas (mil. of cu. ft.) | 23,168.3 | 25,579.8 | 10.4% | 21,828.3 | 19,697.4 | 10.8% |
| Coal (thous. short tons) | 816.0 | 1,575.0 | 93.0% | 1,324.2 | 927.8 | 42.7% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 783,324 | 799,229 | 2.0% | 848,316 | 835,038 | 1.6% |
| Highway Traffic Count Across State Lines | 28,345 | NA | NA | NA | 37,351 | NA |
| Transient Room Taxes (thous. of dol.) | 119.2 | 1,400.8 | 1075.2% | 494.5 | 459.4 | 7.6% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 298.7 | 301.9 | 1.1% | 1,061.2 | 1,015.6 | 4.5% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 477,575 | 486,449 | 1.9% | 480,634 | 472,846 | 1.6% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 173,127 | 178,159 | 2.9% | 176,271 | 169,143 | 4.2% |
| Electric Customers (Residential) | 472,164 | 478,914 | 1.4% | 473,661 | 463,014 | 2.3% |
| Electric Customers (Commercial) | 46,034 | 46,702 | 1.5% | 46,332 | 45,329 | 2.2% |
| Natural Gas Customers (Residential & Commercial) | 446,797 | 459,446 | 2.8% | 447,791 | 436,552 | 2.6% |
| Natural Gas Customers (Industrial) | 554 | 548 | -1.1% | 553 | 567 | -2.4% |

# Utah Business Statistics

| UTAH DATA | Jan 1987 | Jan 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Davis County | | | | | | |
| Non-Ag. Employment (thous.) | 51.6r | 50.8fo | -1.6% | 53.0 | 53.6 | -1.2% |
| Unemployment Rate | 5.7r | 5.4 | -5.3% | 5.4 | 4.6 | 19.6% |
| Auth. Permit Construction (thous. of dol.) | 4,832.6 | 4,139.1 | -14.4% | 12,509.4 | 14,414.2 | -13.2% |
| New Dwelling Units (no.) | 52 | 29 | -44.2% | 89 | 184 | -51.7% |
| Postal Receipts (thous. of dol.) | 420.6 | 383.2 | -8.9% | 388 | NA | NA |
| Electric Customers (Residential) | 46,443 | 48,050 | 3.5% | 47,452 | 45,332 | 4.7% |
| Electric Customers (Commercial) | 3,231 | 3,385 | 4.8% | 3,300 | 3,267 | 1.0% |
| Natural Gas Customers (Residential) | 48,422 | 50,143 | 3.6% | 48,983 | 46,587 | 5.1% |
| Natural Gas Customers (Industrial) | 52 | 52 | 0.0% | 52 | 51 | 2.0% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 54,367 | 54,774 | 0.7% | 54,829 | 53,099 | 3.3% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,175 | 10,897 | 7.1% | 10,620 | 10,134 | 4.8% |
| Salt Lake County | | | | | | |
| Non-Ag. Employment (thous.) | 325.8r | 329.6fo | 1.2% | 335.2 | 330.4 | 1.4% |
| Unemployment Rate | 6.3r | 6.0 | -4.8% | 5.5 | 5.3 | 3.4% |
| Auth. Permit Construction (thous. of dol.) | 36,414.9 | 16,599.3 | -54.4% | 39,963.6 | 59,217.1 | -32.5% |
| New Dwelling Units (no.) | 176 | 91 | -48.3% | 227 | 518 | -56.2% |
| Postal Receipts (thous. of dol.) | 6,391.7 | 6,903.6 | 8.0% | 7,363 | 6,955 | 5.9% |
| Electric Customers (Residential) | 237,201 | 240,253 | 1.3% | 236,720 | 231,946 | 2.1% |
| Electric Customers (Commercial) | 19,752 | 20,355 | 3.1% | 20,008 | 19,362 | 3.3% |
| Natural Gas Customers (Residential) | 218,505 | 221,888 | 1.5% | 217,535 | 213,105 | 2.1% |
| Natural Gas Customers (Industrial) | 243 | 233 | -4.1% | 239 | 255 | -6.2% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 225,522 | 229,290 | 1.7% | 227,174 | 222,965 | 1.9% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 108,736 | 110,038 | 1.2% | 109,904 | 108,106 | 1.7% |
| Utah County | | | | | | |
| Non-Ag. Employment (thous.) | 72.3r | 73.6fo | 1.8% | 73.1 | 72.3 | 1.1% |
| Unemployment Rate | 9.0r | 6.3 | -30.0% | 6.8 | 6.5 | 3.7% |
| Auth. Permit Construction (thous. of dol.) | 5,058.8 | 3,728.3 | -26.3% | 12,464.2 | 8,710.7 | 43.1% |
| New Dwelling Units (no.) | 30 | 15 | -50.0% | 90 | 99 | -9.0% |
| Postal Receipts (thous. of dol.) | 836.1 | 844.4 | 1.0% | 935.8 | 920.2 | 1.7% |
| Electric Customers (Residential) | 50,486 | 51,840 | 2.7% | 52,162 | 49,855 | 4.6% |
| Electric Customers (Commercial) | 6,328 | 5,941 | -6.1% | 6,245 | 6,158 | 1.4% |
| Natural Gas Customers (Residential) | 60,394 | 61,711 | 2.2% | 60,381 | 59,724 | 1.1% |
| Natural Gas Customers (Industrial) | 67 | 69 | 3.0% | 68 | 71 | -4.2% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 62,263 | 64,566 | 3.7% | 62,554 | 62,304 | 0.4% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 18,286 | 19,619 | 7.3% | 18,911 | 16,109 | 17.4% |
| Weber County | | | | | | |
| Non-Ag. Employment (thous.) | 59.7 | 60.0 | 0.5% | 60.7 | 59.9 | 1.3% |
| Unemployment Rate | 7.7 | 7.9 | 2.6% | 7.1 | 6.3 | 11.5% |
| Auth. Permit Construction (thous. of dol.) | 4,259.4 | 1,735.3 | -59.3% | 8,258.4 | 9,338.1 | -11.6% |
| New Dwelling Units (no.) | 34 | 7 | -79.4% | 66.3 | 81.1 | -18.3% |
| Postal Receipts (thous. of dol.) | 617.6 | 582.5 | -5.7% | 608.8 | 622.8 | -2.2% |
| Electric Customers (Residential) | 52,835 | 53,712 | 1.7% | 52,904 | 51,940 | 1.9% |
| Electric Customers (Commercial) | 4,822 | 4,914 | 1.9% | 4,860 | 4,753 | 2.3% |
| Natural Gas Customers (Residential) | 49,231 | 49,974 | 1.5% | 49,070 | 48,119 | 2.0% |
| Natural Gas Customers (Industrial) | 86 | 84 | -2.3% | 85 | 86 | -1.7% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,760 | 46,119 | 0.8% | 45,994 | 45,430 | 1.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,587 | 11,288 | 6.6% | 11,092 | 10,549 | 5.1% |

r Revised    fo Forecast    Na - Not available

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U.S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics

[2] Obtained from Utah Construction Report

[3] Includes services by nonprofit and religious institutions

[4] Includes public schools and college institutions

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| NATIONAL DATA | Jan 1987 | Jan 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,377.7 | 4,660.9 | 6.5% | 4,511.9 | 4,238.3 | 6.5% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,631.5 | 3,872.5 | 6.6% | 3,766.6 | 3,549.9 | 6.1% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 126.2 | 134.4 | 6.5% | 130.5 | 125.1 | 4.3% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 374.2 | 422.7 | 13.0% | 394.6 | 378.9 | 4.1% |
| Index of Leading Indicators (1967=100) | 185.4 | 189.2 | 2.0% | 190.1 | 180.2 | 5.5% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1982-84=100) [1] | | | | | | |
| CPI-U (All Urban Consumers) All Items | 111.2 | 115.7 | 4.0% | 114.0 | 109.7 | 3.9% |
| CPI-U (All Urban Consumers) Food & Beverages | 112.1 | 115.7 | 3.2% | 113.8 | 109.4 | 4.0% |
| CPI-U (All Urban Consumers) Housing | 112.0 | 116.2 | 3.8% | 114.6 | 111.1 | 3.1% |
| CPI-U (All Urban Consumers) Transportation | 102.6 | 107.1 | 4.4% | 105.8 | 101.9 | 3.8% |
| CPI-U (All Urban Consumers) Medical Care | 126.8 | 134.4 | 6.0% | 130.9 | 122.9 | 6.5% |
| CPI-U (All Urban Consumers) Energy | 83.9 | 87.4 | 4.2% | 88.9 | 86.8 | 2.4% |
| Producer Price Index (not seasonally adjusted) (1982=100) [2] | | | | | | |
| Producer Price Index, All Finished Goods | 104.0 | 106.2 | 2.1% | 105.5 | 103.1 | 2.4% |
| GNP Price Deflator (1982=100) (qtly.) | 116.1 | 119.4 | 2.8% | 117.7 | 114.3 | 3.0% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 119.0 | 121.1 | 1.8% | 120.0 | 118.0 | 1.7% |
| Total Civilian Employment (mil.) | 111.0 | 114.1 | 2.8% | 112.7 | 109.8 | 2.6% |
| Unemployment Rate | 6.7 | 5.8 | -13.4% | 6.1 | 7.0 | -12.4% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 16,694.0 | 14,522.9 | -13.0% | 20,806.5 | 19,371.4 | 7.4% |
| Residential | 7,873.9 | 6,609.7 | -16.1% | 9,734.8 | 9,627.6 | 1.1% |
| Nonresidential | 6,221.8 | 5,353.6 | -14.0% | 7,210.2 | 6,365.0 | 13.3% |
| Non-Building | 2,598.3 | 2,559.6 | -1.5% | 3,834.9 | 3,378.8 | 13.5% |
| New Dwelling Units (no.) | 119,753 | 84,475 | -29.5% | 126,906 | 139,672 | -9.1% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 5.45 | 5.90 | 8.3% | 5.86 | 5.84 | 0.4% |
| Long Term (30-year Treasury bond yields) | 7.60 | 5.69 | -25.1% | 8.48 | 7.99 | 6.1% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 7.50 | 8.75 | 16.7% | 8.31 | 8.17 | 1.7% |
| Mortgage Rates (new homes) | 9.14 | 8.75 | -4.3% | 8.91 | 9.72 | -8.3% |

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[1] Beginning with the January 1988 Consumer Price Index (CPI), the reference base was changed from 1967=100 to 1982-1984=100.

[2] Beginning with the January 1988 Producer Price Index (PPI), the reference base was changed from 1967=100 to 1982=100.

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

F.W. Dodge Report, McGraw-Hill: National Construction Data.

Survey of Current Business, U.S. Department of Commerce: New Home Mortgage Rates.

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Indexes.

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# THE ROLE OF VENTURE CAPITAL IN HIGH TECHNOLOGY FINANCE

Jan Elise Crispin and John Brereton[1]

Misconception, myth, and misinformation seem to surround the subject of venture capital. Although volumes have been written on the subjects of both venture capital and the overseers of such funds (venture capitalists), to the average person (and most entrepreneurs) venture capital is still an enigma. This objective of this study is to identify some of the more salient features of the venture capital industry, and on a broader level, to identify and discuss some misconceptions surrounding the venturing process.

Venture capital represents something different to almost everyone involved with high tech industries. The engineer-turned-entrepreneur sees it as both a blessing and a bane. On one hand, venture capital is the all-important risk capital needed to begin or sustain a fledgling company. However, in acquiring this investment -- if it is possible-- the entrepreneur gives up something in return, usually at least some equity in the company and often managerial control.

The average person has a different view. Articles and stories have glamorized the world of venture capital. It is perceived as a wheeling-dealing arena where leveraged buyouts (LBOs) and initial public offerings (IPOs) yield extraordinary profits. Among their peers, the venture capitalist is viewed as a special breed of investor who centers his attention (and funds) on early stage companies -- usually technology-driven firms -- whose startup or continued expansion is restricted by a lack of financial capability.

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[1] Jan Crispin is a research analyst at the Bureau of Economic and Business Research; John Brereton is president of The Brereton Group and collaborated on this project in a consulting capacity.

This article is the first in a two-part series on venture capital. It is also the first in a series of articles resulting from a study of Utah's high technology industry. Future articles will cover case studies of Utah firms and other issues such as marketing and management in technology oriented firms, and identifying the major growth sectors in the high technology industry in both the United States and abroad. Financial support for this research came from the Centers of Excellence, Utah Technology Finance Corporation, and the University of Utah. Their support is gratefully acknowledged. R. Thayne Robson, Director of BEBR and Jan Elise Crispin are reponsible for the direction of this project.

Opinions are also divided as to the importance and availability of venture capital. Entrepreneurs with a history of starting successful high tech firms claim there is a glut of venture capital in the market. Less experienced entrepreneurs, on the other hand, claim there is a shortage of such financing and point to the number of young high tech failures as proof. Some entrepreneurs avoid venture capital like a plague, while others go to extreme measures to attract this risk capital.

From this, it is clear that no single interpretation or description of venture capital or its role in the equity capital market is likely to satisfy everyone. Still, there are some characteristics of venture capital which are widely accepted.

## What Is Venture Capital?

Technically described as "the early-stage financing of new and young companies seeking to grow rapidly," venture capital fuels the process of innovation, generates the creation of new products and benefits economic activity disproportionately to the relatively small amounts of capital invested. Stanley Pratt, acknowledged venture capital guru, further defines venture capital by identifying three key characteristics in the use of venture capital funds:[2]

1. The actual or potential equity participation of the venture capitalist either through a direct stock purchase, or through warrants, options, or convertible securities;

2. A long term investment discipline that requires the venture capitalist to wait usually five to ten years for investments to provide a significant return;

3. Active involvement in the management of the venture company by the venture investor.

Several other characteristics can be added to this short list. Specifically,

4. Venture capital is invested with the goal of earning extraordinary returns. This compensates the investor for the extraordinary risks that are borne in the funding of a new or young company;

5. As a rule, venture capitalists invest in young companies that are poised to experience robust growth through an innovation.

This list could be lengthened to reflect the different types of venture funds, investment objectives, and degree of management involvement. There is no "typical" venture capitalist, just as there is no "typical" entrepreneur.

## Overview of the Venture Industry

Last year the venture capital industry numbered 800 firms, an increase of 237 percent from just 11 years ago. Although the total capital under management at these firms has not been finalized for 1987, preliminary figures indicate that the size of the capital pool could be as high as $28 billion, an increase of more than 16 percent from the funds under management in 1986. In fact, the venture capital funds have been steadily increasing since 1978 at an annual rate of 27 percent (Table 1).

**Table 1**
**Venture Capital Trends and Forecasts**
*(billions of dollars)*

| Year | Size of Total Capital Pool | Annual Percent Change |
|---|---|---|
| 1979 | 3.8 | 5.50 |
| 1980 | 4.5 | 18.42 |
| 1981 | 5.8 | 28.88 |
| 1982 | 7.6 | 31.03 |
| 1983 | 12.1 | 59.21 |
| 1984 | 16.3 | 34.79 |
| 1985 | 19.6 | 20.25 |
| 1986 | 24.1 | 22.96 |
| 1987 | 28.0 | 16.18 |

Sources: *Venture Capital and Innovation*, Joint Economic Committee (U.S. Government Printing Office, Washington, D.C., 1985) p. 6; *Pratt's Guide to Venture Capital Sources*, 12th ed. p. 9.

Since 1978, the independent private venture capital firms have emerged as the dominant segment of the venture industry. The "independents" include

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[2] Pratt, Stanley E. "Overview and Introduction to the Venture Capital Industry." Pratt's Guide to Venture Capital Sources (edited by Jane K. Morris) 12th ed. (1988); Massachusetts: Venture Economics, Inc. pp. 7-16.

### Table 2
### Sources of Capital Commitments
### Institutionally-Funded Independent Private Firms Only
*(millions of dollars)*

| | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|
| Total | $1,432 | $3,408 | $3,185 | $2,327 | $3,332 | $3,000 |
| Pension Funds | 474 | 1,070 | 1,085 | 767 | 1,672 | 1,400 |
| Foreign Sources | 188 | 531 | 573 | 548 | 361 | 300 |
| Corporations | 175 | 415 | 463 | 274 | 350 | 350 |
| Individuals and Families | 290 | 715 | 467 | 303 | 392 | 350 |
| Insurance Companies | 200 | 410 | 419 | 254 | 348 | 400 |
| Endowments and Foundations | 96 | 267 | 178 | 181 | 209 | 200 |

Source: *Venture Capital Yearbook 1987*, Venture Economics, Inc.; data for 1987 are estimates by the U.S. Department of Commerce, International Trade Administration, *U.S. Industrial Outlook 1988*, January 1988, p. 54-3.

institutional private firms, families, and individuals. This group received 85 percent of ~~the~~ $4.5 billion of new capital in 1986 and controlled 75 percent of the entire venture capital pool. These funds range in capital size from $20 million to $75 million. Investment activity is normally at a rate of 10 to 15 new commitments per year with each new commitment receiving from $250,000 to over $1 million. Corporate industrial groups ranked second with 16 percent, and Small Business Investment Companies (SBICs) were a distant third, accounting for 9 percent of the capital under management.[3]

## From Where Does the Money Come?

Pension funds continue to be the most significant source of capital commitments for venture capital. During the period 1984 to 1986 when almost every other source reduced its commitment, pension money commitments increased at a 24 percent rate. In 1986, pension funds invested close to $1.7 billion in venture capital. Although projections provided by the International Trade Administration show the 1987 figure to be slightly less ($1.4 billion), pension funds still accounted for a majority share of new capital commitments. In order of importance, major investors in venture funds in 1987 were: pension funds (47%), insurance companies (13%), individuals and families (12%), and corporations (17%). Table 2 shows the source of capital commitments for institutionally-funded independent private firms.

## Where Does the Money Go?

The venture capital industry has grown at a phenomenal pace in the past decade. Certainly, the accelerating rate of technology development coupled with the rise of entrepreneurial spirit, have been the main catalysts in this surge of venture investing. Companies specializing in computer hardware/systems and software/services, received 29 percent of venture investments in 1986. This is down from just two years ago when firms specializing in these areas received 38 percent of the total invested. However, electronics-related companies (including those mentioned above) still receive well over half of all venture capital invested each year. One explanation for this high concentration is that computer-related industries have, in the past, provided the greatest opportunities for extraordinary returns that are generally the bottom-line issue of the venture capitalist. Medical and health care-related activities are another group that continue to attract significant sums of venture capital. Traditionally, venture capital has been used to fund entrepreneurs in high tech ventures. Although this is still the case for the bulk of investments, venture funds are increasingly considering non-high tech activities as well. A summarization of the investment patterns of venture capital funds is shown in Table 3.

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[3] Pratt, Stanley E. p. 89.

**Table 3**
**Disbursements of Venture Capital by Industry**
*(percent of dollar amount invested)*

| Sector | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|
| Computer Hardware and Systems | 24 | 23 | 22 | 19 |
| Software and Services | 13 | 15 | 9 | 10 |
| Telephone and Data Communications | 9 | 11 | 14 | 11 |
| Other Electronics | 10 | 12 | 12 | 13 |
| Total Electronics Related | 56 | 61 | 57 | 53 |
| Medical/Health Care Related | 10 | 11 | 9 | 12 |
| Commercial Communications | 3 | 3 | 7 | 5 |
| Energy Related | 4 | 2 | 1 | 2 |
| Genetic Engineering | 3 | 3 | 4 | 4 |
| Industrial Automation | 4 | 4 | 4 | 2 |
| Industrial Products and Machinery | 4 | 4 | 3 | 2 |
| Consumer Related | 8 | 6 | 7 | 9 |
| Other Products and Services | 8 | 6 | 8 | 11 |
| Total | 100 | 100 | 100 | 100 |

Sources: *Pratt's Guide to Venture Capital Sources*, 10th ed. (1986) p. 38 and 12th ed. (1988) p. 39.

Although it is difficult to determine where venture investors will place their money in the future, a survey conducted by *High Technology Business* of 200 investment firms showed that the hottest industries in the 1988 area are expected to be medical equipment, biotechnology, and communications.[4]

The recent turn of events in the financial market (namely the stock market crash of October 1987) has limited the exit opportunities, via the public market, for many venture investors. On the flip side, by reducing the valuation of private companies, the stock market decline has created numerous attractive opportunities for venture investors. The long-term effects of the stock market crash have yet to be seen.

## Geographical Concentration of Venture Funds

Venture capital funds tend to be specialized geographically as well as by industry. Professionally managed venture capital has historically been concentrated in the Northeast and San Francisco Bay Area. The major centers are in New York, San Francisco (including Silicon Valley), Boston and Connecticut. Secondary centers include Chicago and Minneapolis. The spatial patterns of venture investments are detailed in Table 4.

Although New York, Massachusetts and California still receive substantial amounts of venture capital, other areas around the country are beginning to see significant infusions as well. Venture firms outside these primary areas raised $852 million in 1986. While venture firms still prefer investing "close to home", when considering an investment in a distant area, venture capitalists will try to involve another group located within 200 miles of the business opportunity.

## Trends in the Venture Capital Industry

There are several trends in the venture industry which warrant comment in this overview. Over the past two years, many large venture firms have

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[4] Paul, Frederick. "Where Venture Capital Is Investing Now," High Technology Business, (March 1988), p. 19.

### Table 4
### Distribution of Capital Commitments
*(independent private firms only)*

Annual New Capital Commitments *(millions)*

|  | 1986 | 1985 |
|---|---|---|
| New York | $ 1,368.5 | $ 511.8 |
| Massachusetts | 688.7 | 400.8 |
| California |  |  |
| Southern | 52.5 | 94.7 |
| Northern | 464.1 | 663.6 |
| Connecticut | 237.0 | 201.8 |
| Maryland | 157.2 | 12.9 |
| Washington | 103.3 | 26.8 |
| Minnesota | 52.0 | 0 |
| Other States | 302.2 | 462.9 |

Regional Breakdown *(millions)*

|  | 1986 | 1985 |
|---|---|---|
| Northeast | $ 2,346.4 | $ 1,196.2 |
| West Coast | 654.0 | 785.1 |
| Mid Atlantic | 204.2 | 101.6 |
| Midwest/Plains | 89.3 | 152.4 |
| Southwest/ Rockies | 82.9 | 82.8 |
| Southeast | 48.7 | 57.2 |

Source: *Pratt's Guide to Venture Capital Sources*, 12th ed. (1988) p. 91.

switched their investments to focus on leverage buyout opportunities (LBOs), later stage financing, and follow-on investments. Later stage investment reached $877.8 million in 1986, up from $540.6 million in 1985 -- an increase of 63 percent. Growth in LBO activity was even more substantial. Total investment in LBOs jumped from $481.5 million in 1985 to $924.0 million in 1986, a 92 percent increase. Some individual funds showed an even higher tendency to participate in LBO activity.[5]

The emergence of this trend illustrates several important characteristics of the venture industry. By its nature, the venture capital industry is cyclical and opportunity-driven. During the past several years, the equity market created an extraordinary opportunity for LBOs as they offered both a lower risk and a shorter payback period than traditional venture capital investments. The venture industry was the first to respond by switching their funds to participate in these types of investments. In addition, economic conditions and the equity market created an unusual opportunity in initial public offerings (IPOs). This opportunity encouraged venture funds to switch from early stage investments, to later stage investments so as to accelerate the company's development, thereby positioning the company for an offering. The recent upheaval in the stock market changed all that. Presently IPOs have lost their lucrative lure. Until the market shows signs of stabilizing, IPO activity will likely remain depressed.

Venture capital is becoming increasingly concentrated. The large funds are getting larger and the small seed funds are finding it more difficult to raise money. Raising funds is also extremely difficult for firms without strong track records. At the start of 1987, 55 percent of the total venture capital pool was managed by 64 firms, each with $100 million under management. About 80 percent of the money raised by private funds in 1986 went to firms that already manage at least one fund. More importantly, the institutional investor is emerging as a dominant player in the venture capital industry. To these investors, managerial talent and experience are the key considerations in determining who they select as a fund manager.

Larger funds managed by larger firms mean fewer financings at the seed/idea stage. According to industry analysts, many venture firms have lost interest in funding these kinds of companies. Investments in young, fledgling firms require more time and effort than investment in larger firms, hence the LBO trend. The average size of early and late financing has increased over the past three years. Big firms are engaging in fewer deals at larger funding levels. This trend is expected to not only continue but to increase. Companies receiving venture capital infusions will be forced to pay more for the money -- marginal deals may not find money under any circumstances.

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[5] U.S. Department of Commerce, International Trade Administration. U.S. Industrial Outlook 1988, "Venture Capital", 54-1(5).

## Investment Criteria

All venture capital firms have specific investment criteria which serve as a guideline in the selection process. However, most firms are willing to bend the rules to pursue an opportunity. Such a liberal exception policy makes it very difficult to generalize investment criteria. Nevertheless, there are three guidelines which seem to be industry standards. These guidelines center on the earnings potential of the prospective company; the potential value of the market; and lastly, the management capabilities of the potential recipient firm.

### Earnings Potential

Because a public offering is such an important vehicle to a venture fund as a way of exiting an investment, a company's potential future earnings are a deciding factor in the selection process. For the sake of illustration, assume a venture capitalist requires a 35 percent rate of return and is willing to invest $1 million for seven years. For this, the investor wants 50 percent ownership of the company. After seven years the venture capitalist prefers to take the company public. At the time of the IPO, the company must be worth approximately $16.3 million. To qualify for venture capital consideration under this scenario, the company must currently have a price/earnings multiple of 15, have earnings of approximately $1.1 million annually, and have sales (assuming a 10% margin) of $10.8 million.

It is a dollar-and-cents decision. A company must have the potential to generate big earnings in order to qualify as a venture investment. The key word here is potential. One way to evaluate a company's potential is to look at its market, and this, then, is the second investment hurdle.

### Market Potential

The safest way for a venture capitalist to realize a 35 or 40 percent return on his investment is to invest in a company that offers a product or service with a technological edge in a rapidly growing market. The market served by any particular firm is as important as the firm's innovation. Venture capitalists like companies that are in big, growing markets. Big markets create an opportunity for big earnings. Market potential also reduces the risk of the investment. A rapidly growing market buys a company time to work out its problems and to develop its product. The market criteria developed by Utah Ventures, for example, typifies what a venture capitalist wants. This investor looks for a company that serves a market that has the potential of $100 million or more in commercial industry sales. Furthermore, the company's annual sales potential should be $20 million and should be achievable in five years. These standards are common in the venture capital industry.

### Management

The third important consideration is the quality and skill of the company's management team. Although management is listed third in this study, in reality, it probably ranks first in the majority of venture capitalist decisions. No matter how sophisticated the technology or how large the market, without a strong management team, the success of the company is questionable at best. At the very least, the return to the venture investor could be adversely affected. For example, 30 percent of all young venture companies fail in the first two years; another 30 percent fail after two years. Only 10 percent or so are considered to be successful investments. While the success of a young high tech company is not solely determined by the business acumen of the management team, it is quite possibly the most significant component in the company's failure.

## Investment Stages

A venture capital investment is frequently categorized according to the portfolio company's

**Table 5**
**Stages of Venture Capital Financing**

| | |
|---|---|
| **Early Stage Financing** | |
| *Seed Financing* | Small amount of money involved ($50,000). The entrepreneur uses this capital to develop his concept. This is the earliest stage of financing. |
| *R&D Financing* | A tax advantaged partnership set up to finance product development. Investors secure tax writeoffs for their investments. If product becomes successful, they share in profits. |
| *Startup* | Money is used for product development and initial marketing. While startup companies are organized, they have not sold products commercially. |
| *First Stage* | Entrepreneur generally has developed a prototype. Venture investment is used to initiate full scale manufacturing and sales. |
| **Expansion Stage Financing** | |
| *Second Stage* | *Working capital for the initial expansion of a company that is shipping product,* but may not yet be showing a profit. |
| *Third Stage* | Also called "Mezzanine" financing. Capital at this stage is used for major expansion including physical plant expansion, marketing, and working capital. |
| *Fourth Stage* | Also referred to as "Bridge" financing. This is financing for a company expecting to go public within six months to a year. Often bridge financing is structured so that it can be repaid from the proceeds of a public underwriting. |
| **Acquisition/Buyout Financing** | |
| *Acquistion Financing* | Funds provided to a firm to finance its acquisition of another company. |
| *Management/ LBO* | Funds provided to enable an operating management group to acquire a product line from either a public or private company concern. |
| *Public Market* | The purchase of over-the-counter stock. The venture investor is involved with improving the company. |

Source: *Pratt's Guide to Venture Capital Sources* (edited by Jane K. Morris) 12th ed. (1988) p. 137. *Outline for a New High Technology Business Plan*, Arthur Young and Company, 1983.

stage of development. These categories provide a means of evaluating the risks associated with a specific investment, and to apply investment criteria. Different stages have different investment criteria and different expectations as to the rate of return. A brief description of these stages is shown in Table 5.

It is unusual for a company to fall neatly into any one of these categories. Most often, a company is somewhere in between one of the stages. However, the development stages are descriptive and allow an investor to evaluate the company.

### Seed/Idea Financing

Contrary to public perception, seed or idea companies are not likely candidates for venture funds. Only 11.9 percent of private venture capital funds are invested in pre-startup (idea) or seed companies, and only 5.1 percent of SBIC funds are invested in such companies. This lack of involvement reflects the unusually high risk associated with unproven companies. At the idea stage the technological feasibility of an innovation is questionable at best, and the market feasibility is virtually nonexistent. It may take years before the product or the company is ready for commercialization.

At the idea stage, the entrepreneur usually relies on his savings or borrows from family members or friends to start the company. This is referred to as bootstrap financing. Several prominent firms in Utah began with bootstrap financing; for example, WordPerfect Corporation, Deseret Pharmaceutical, and Sorensen Research. One study reported that of the high tech firms surveyed, 62 percent relied on the personal savings of the founder for the initial injection of capital to start the company. Many times a company is started while the founder remains employed at a large corporation. These approaches are basically incremental and as such, offer some advantages to the founder. The most obvious advantage is that incremental startup reduces the financial risk of setting up a company, especially when compared to loan-based launches. The major disadvantage is that bootstrap or part time involvement does not allow vigorous research and usually does not yield the large profits associated with rapid jumps in innovation or technological changes.

### "Angels"

Another source of risk capital to the seed company comes from investors who have been appropriately named "angels". These investors, or angels, represent the largest pool of risk capital for seed companies and other early stage companies. Yet, despite their importance to entrepreneurs, these investors are elusive. One study sponsored by the Office of Advocacy in 1980, researched the role of the individual investor in the financing of high tech firms in the New England region. The results of this study are very revealing. The overwhelming majority (78%) of these investors preferred to invest in high tech seed companies. Most of the investors had a working knowledge of the technology. These investors required lower rates of return than the professional venture investor, and according to the report, were motivated by other concerns such as increasing employment in the community.

Research indicates that most angels invest close to home, relying on an informal network of friends and associates for investment opportunities. In cases where angels have invested, there were similarities between them and the individuals requesting money. Just like the "pros," the individual investor considered management the most important factor in his or her investment decision; however, the "chemistry" between the two was almost as important as the manager's skill. The importance of these factors was followed by the innovation itself and then the market potential of the product or service.

Given the informal nature of seed company financing, it is very difficult to identify or to quantify the number of dollars individual investors have invested in these companies. However, it is obvious that these people play an important role in the venturing process -- they were willing to provide risk capital at a firm's most crucial moment, when no one else would.

### Other Sources

Seed companies also rely on programs like the Small Business Inovation Research program (SBIR), state-funded programs, and incubator facilities. It is important to remember that at this stage, a seed company may not be formally organized, may not have either a business plan, nor key management (other than the founder). Without these essential elements, it is extremely difficult for a venture capital firm to evaluate a seed company. This is why a seed company is not a likely candidate for venture capital and why seed programs and incubator centers are so important to these fledgling firms.

### Early Stage

Once a company has cleared the initial R&D stage, adopted a formal business plan, selected key management and can demonstrate the ability or potential to generate extraordinary returns, venture capital becomes a likely source of funds. As reported in the JEC study, "Venture Capital and Innovation," 59 percent of venture capital financing by independent firms occurs in a company's startup (first stage) and early expansion stage (second stage). For most venture capitalists, investment in a company at the early expansion stage is considered to be the first of several follow-on investments. The venture capitalist knows that a growing company will need additional capital for operations, manufacturing, marketing, and new development. The amount of initial funding varies depending on the company's stage of development. The average size of an investment for startup companies is close to $2 million; of course, this amount can be phased into the company on an "as needed" basis.

When a venture capitalist makes an investment, he becomes part owner in the company. Ownership can take a number of forms; but commonly, it is in the form of a direct stock purchase (preferred or common), warrants, and/or convertible subordinated debenture securities. Regardless of the size or type of equity position, the main objective of the investor is to purchase equity (at a reasonable rate) in a rapidly growing corporation so that the shares may be sold at a later date for a profit. Unlike other types of investments, the deal is negotiated between the company and the investor. Most executives of small firms are aware of the venture investors' objectives. Several founders/owners interviewed for this study said they preferred to develop at a slower pace, relying on internal funds rather than accept a venture partner. Their reluctance underscores a very important point: venture capital is not suitable for every high tech firm; just as every high tech firm is not a candidate for venture capital.

### The Issue of Control

Ownership or equity participation means involvement. Venture capitalists know through their experience that the degree to which a company is well managed is a good indicator of its potential value. The venture capitalist's involvement is intended to add value to the company. As such, he is usually involved with strategic issues like finance or marketing. The objective is not to manage the firm's day-to-day operations, but rather provide guidance on issues that may be out of the experience level of the founder.

For some entrepreneurs this involvement, no matter how small, is another bitter pill to swallow. They fear that as the company grows and follow-on investments are needed, they will be squeezed out of the picture. Granted, this is a possibility, but only if the entrepreneur and his management team prove to be weak managers. Management changes may occur as the result of unmet performance targets that were agreed to at the time the initial investment was made.

Ownership and management involvement by venture capitalists are two disincentives for many entrepreneurs who might otherwise rely on venture capital. Several founders interviewed expressed this opinion. "I'm not going to give up something that has taken so long to build," was the response of one president when asked about the possibility of using venture capital. His sentiments are not uncommon. In some cases, it is simply a lack of understanding; in others, it is a reluctance to give up the potential or the control.

Many entrepreneurs turn to alternative capital sources in order to retain control and equity in the company. Examples of these sources include accountants, investment bankers, and financial planners. These investments are usually structured as private placements arranged by a financial intermediary. Private placements have been very important to local Utah companies like Hart Scientific, Inc., Unibase, and ALPS, Inc. According to Investment Dealers Digest Information Services, private placements have more than doubled over the last five years. It is difficult to identify an exact number because private placements are largely unregulated. Typically, private placements raise money for promising small companies, primarily startups, and for those firms with a limited operating history. The general partner will raise between $500,000 and several million dollars by selling units of up to $25,000 to as many as 80 investors or client-accredited investors or corporations.

### Expansion Stage

A company maturing to the IPO stage will require additional investments. This round of financing may be four to five times the amount of the initial capital investment. These additional fundings are referred to as follow-on investments or later stage financing.

Later stage financing has accounted for about 40 percent of the dollars invested by venture capital funds. In the coming years, however, the amount of dollars for later stage financing will increase dramatically as the startup companies financed in the early 1980s begin to mature. These mature firms, with their increased appetite for capital, will envelop much larger quantities of money than was committed at the founding stage. This need for later stage financing will be particularly acute in a high tech center like Utah. Many high tech firms have been started in Utah in the past three years and most of these new firms were idea companies. As idea companies, their initial capital needs were relatively small. Now, many of these companies are nearing the point of operations and expansion, and need more dollars to continue their development.

### Second and Third Stages

It is convenient to break down later stage financing into several broad categories. Second stage companies, for example, are expanding. They are shipping product, but require infusions of capital to sustain operations. In all likelihood, these companies are not profitable. At the third stage, the company has turned the corner and is profitable. Capital requirements at this point center on expansion. The company may lack sufficient profits to sustain rapid growth. It is hoped that additional financing or follow-on investments by the venture capitalist will accelerate the company's development, and eventually its profitability. At the last or fourth stage, a company is ready for a public offering, merger or acquisition. Venture capital may be needed at this point because the environment does not favor a sale.

Since later stage or follow-on financing is tied to a company's performance, it is difficult to estimate the average funding level. Because each company's needs are different, any additional funding will vary. However, one authority estimates that the average size of financing for a company at the expansion phase is near $3.6 million, excluding fourth stage, or bridge financing.

The number of later stage financings has jumped in recent years. Between 1985 and 1986 later stage financings increased 63 percent. One reason for this increase is the risk factor involved in financing a more mature firm versus an earlier stage company. Venture capitalists can commit more dollars and less management involvement. Another reason for this growth has been the IPO market. Companies in the expansion stage are much closer to a public offering than is a start-up company. When the IPO market is hot, venture capitalists want to push as many deals as they can into this market. Later stage investment is one way to do this.

### Exit Stage

The most important stage to a venture capitalist is the disinvestment stage or the "exit". It is only at this stage that the venture capitalist realizes his return. Most venture investors rely on capital appreciation rather than current income to generate their return. And recently, the best way to leverage that capital appreciation has been the IPO market. In 1987, there were 125 venture-backed IPOs, totaling $3.3 billion. This dollar volume represented a 55 percent increase over the 1986 total of $2.1 billion, and is 12 times greater than the 1978 totals of 10 IPOs priced at $91 million. It is clear from these comparisons that the equity market created a tremendous opportunity for IPOs, and that this opportunity radically changed the complexion of the venture capital industry. Undoubtedly, "Black Monday" (October 19, 1987) did deflate the IPO market; and while it may be somewhat premature, it seems reasonable to assume that this will have an impact on the venture industry. Perhaps more venture funds will return to early stage investments. This shift would change virtually every aspect of the industry. For now, however, it seems clear that barring an economic downturn, venture capital will continue to grow at a vigorous pace.

## Summary

By any measure, the venture capital industry has been very successful. Last year over $3 billion was invested by venture investors -- $28 billion has been invested in hundreds of companies over the past decade. These investments have created jobs and income. They have also helped to improve our nation's productivity and its competitiveness by acting as a catalyst for a renewed spirit of entrepreneurialism.

Venture, or risk capital, has played a unique role in the capital markets as well. In the past decade the venture capital industry has undergone many changes. Growth is the most obvious change. The venture capital market grows larger every year. The entry of institutional investors such as pension funds and insurance companies has fueled this phenomenal growth, while forcing other changes in the industry at the same time. For example, the venture industry is gradually losing its cyclical character. Dollars are being invested every year, not just during periods of economic expansion. The venture market is also in the process of consolidation. Large firms are getting bigger, and small or new firms are having a more difficult time competing. The race to attract institutional dollars has forced venture capital firms to use a systematic investment process. Intuition may still play a part in the investment process, but much less than ten years ago.

Although the venture capital industry is dynamic, one characteristic venture has remained impervious to change. That is, venture capital has been, and continues to be, opportunity driven. It seeks investments that provide superior returns whether the opportunity comes in the form of a cookie store or superconductor research. Also, while venture capital grew up with high tech, its loyalty is to the bottom line. This accounts for the recent drop in interest in computer hardware companies and an increased interest in communications and biotechnology. Some see these changes as simply investment fads. This is not the case. Venture capital is following its own first commandment: seek opportunity.

This intense drive and the need to provide superior returns to compensate investors for unusual risks means that not every promising firm is a candidate for venture capital. The selection process is tough. Only a few companies out of a hundred are ultimately funded by venture capital. In order of importance, the venture capitalist evaluates a company's management team, its innovation or product, and the market potential for that product.

Venture capital is a people-oriented investment. In fact, unlike other capital markets where the buyer and seller rarely know each other, a venture investment is a partnership between the entrepreneur and the investor. Company management must be competent, experienced and committed. In the final analysis, it is the management that decides the success of the company. A venture investment is a partnership. The investor not only brings needed risk capital to the partnership, but also the intention of being involved in the firm management. This does not mean involvement in the daily activities of the firm; rather, the venture capitalist provides expertise on strategic issues such as financing and marketing. Sometimes even this level of involvement is a bitter pill to swallow for the entrepreneur, which explains why some firms would rather go it alone.

Two additional important factors in the venture capitalist's financing decision is the product and its market. The company must have an idea or product which distinguishes it from the herd. But, the venture investor is generally not looking for novelty. He is searching for a product with a competitive edge that will translate into extraordinary profits when it is introduced to the market. Monopolizing tiny niche markets is another area that is not attractive to the venture capitalist. The company's product or idea must have sizable market potential. Big markets with big potential are preferred rather than small markets with limited potential.

These three hurdles -- management, innovation, market potential -- best explain why so many firms are not candidates for venture capital. Even if these three hurdles are met, a firm may still not be eligible. Most venture companies are not seed companies. The potential firm must have a track record, a management team, and a business plan. A company must fit the venture investor's portfolio, in terms of age, size, product and location. A prospective venture company's structure and ownership must allow easy exit by the investor.

Given these requirements, it is not surprising that relatively few firms receive venture capital financing. The vast majority of young companies, including young high tech companies, are bootstrap companies. The entrepreneur's or founder's savings, loans from family and friends and even second mortgages, finance the early years of most companies. Only after there is a product, a business plan, a real company, does venture capital become a viable financing source.

Venture capital is therefore, just one piece of the finance puzzle. It is appropriate for some companies. However, for the vast majority of high tech firms, venture capital will not play a role in their development. That is just one reason other financial institutions, most notably commercial banks, must become involved in high tech. Banks are the lifeblood of these companies. Without their lending, most companies could not survive. Yet, as important as this role is, there seems to be a reluctance on the part of many banks to make a full commitment.

In the next Business Review Article entitled "Does Utah Have a Capital Gap?" the issues surrounding venture capital are brought closer to home. Utah's venture industry is examined within the context of national trends and patterns.

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# Utah Business Statistics

| UTAH DATA | Feb 1987 | Feb 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,489 | NA | NA | NA | 18,340 | NA |
| New Corporations (no.) | 425 | 516 | 28.0% | 470 | 452 | 3.9% |
| New Car, Truck and Motorhome Sales (no.) | 4,486 | NA | NA | NA | 6,062 | -19.1% |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 60.90 | 66.90 | 11.8% | 64.59 | 55.83 | 15.7% |
| Lambs (cwt) | 70.30 | 77.80 | 12.0% | 73.68 | 67.39 | 9.3% |
| Milk Wholesale (cwt) | 12.20 | 11.80 | -4.7% | 11.86 | 11.92 | -0.5% |
| Alfalfa Hay, Baled (per ton) | 67.00 | 74.00 | 12.1% | 68.58 | 66.73 | 2.8% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 36,034 | 45,368 | 10.2% | 42,953 | 37,990 | 13.1% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 101,571 | 116,379 | 64.4% | 124,137 | 127,412 | -2.6% |
| Residential | 38,741 | 36,231 | 14.0% | 52,137 | 59,611 | -12.5% |
| Nonresidential | 43,835 | 41,814 | 112.6% | 40,202 | 48,606 | -17.3% |
| Public Works and Utilities | 18,995 | 38,334 | 208.1% | 31,799 | 19,445 | 63.5% |
| Total Permit Construction (thous. of dol.) [2] | 70,826.5 | 55,590.0 | -35.9% | 86,574.4 | 109,736.1 | -21.1% |
| Residential | 32,639.9 | 27,284.0 | -37.7% | 40,055.8 | 57,807.4 | -30.7% |
| Nonresidential | 23,912.7 | 16,996.5 | -46.2% | 32,881.1 | 37,850.1 | -13.1% |
| Additions, Alterations and Repairs | 14,273.9 | 11,309.5 | 2.2% | 13,638.3 | 14,099.1 | -3.3% |
| New Dwelling Units (no.) | 540 | 406 | -40.5% | 586 | 1,040 | -43.7% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 749.6 | 757.7 | 1.4% | 757.7 | 752.1 | 0.7% |
| Total Employed Persons | 693.2 | 709.7 | 2.2% | 710.6 | 707.6 | 0.4% |
| Unemployed Persons | 56.3 | 48.0 | -7.9% | 47.0 | 44.3 | 6.2% |
| Percent Total Labor Force | 7.5 | 6.3 | -8.2% | 6.2 | 5.9 | 5.9% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 627.6 | 637.1 | 1.7% | 642.3 | 635.4 | 1.1% |
| Manufacturing | 88.8 | 93.5 | 5.2% | 93.5 | 91.4 | 2.4% |
| Mining | 7.6 | 8.1 | 6.5% | 8.1 | 7.8 | 4.4% |
| Contract Construction | 24.0 | 20.1 | -16.8% | 26.6 | 31.8 | -16.4% |
| Transportaion, Communication and Utilities | 37.1 | 37.9 | 2.7% | 37.9 | 37.3 | 1.5% |
| Wholesale Trade | 34.6 | 34.1 | -1.4% | 35.7 | 35.8 | -0.2% |
| Retail Trade | 115.0 | 114.2 | -0.8% | 118.6 | 117.3 | 1.2% |
| Finance, Insurance and Real Estate | 33.6 | 33.5 | 0.6% | 33.8 | 33.1 | 2.1% |
| Services [3] | 142.8 | 152.1 | 6.8% | 146.5 | 139.3 | 5.2% |
| Federal Government | 40.5 | 39.[illegible] | -1.3% | 39.7 | 40.5 | -2.0% |
| State Government [4] | 39.3 | 38.8 | -0.5% | 37.4 | 38.0 | -1.7% |
| Local Government [4] | 64.6 | 65.4 | 0.8% | 64.4 | 63.2 | 2.0% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 38.7 | 40.0 | 6.1% | 40.1 | 39.8 | 0.8% |
| Mining | 43.2 | 42.8 | 9.5% | 41.6 | 42.3 | -1.6% |
| Wholesale Trade | 38.0 | 38.7 | 2.1% | 38.8 | 37.2 | 4.2% |
| Retail Trade | 27.0 | 27.6 | 0.7% | 28.4 | 28.0 | 1.6% |
| Amount of Unemployment Compensation (thous. of dol.) | 11,871.3 | 8,993.4 | -30.6% | 7,253.1 | 8,560.8 | -15.3% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,443.2 | 2,088.9 | -6.7% | 2,411.2 | 2,387.4 | 1.0% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 262,327.8 | 275,699.4 | 36.0% | 143,385.2 | 124,509.7 | 15.2% |
| Sales and Use Tax | 131,142.0 | 137,158.9 | 72.6% | 48,776.7 | 46,022.3 | 6.0% |
| Motor Fuel Tax | 5,042.5 | 9,983.1 | -4.2% | 9,834.5 | 7,996.7 | 23.0% |
| Individual Income Tax | 78,084.2 | 74,745.1 | 37.8% | 50,046.8 | 40,093.1 | 24.8% |
| Corporation Franchise Tax | (835.2) | 1,175.8 | -1326.2% | 7,250.2 | 4,281.5 | 69.3% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,065.5 | 1,114.7 | 2.3% | 1,157.6 | 1,102.2 | 5.0% |
| Crude Oil to Refineries (thous. of bbls.) | 3,425.8 | 3,484.7 | -5.3% | 3,785.6 | 3,863.9 | -2.0% |
| Crude Oil (thous. of bbls.) | 2,822.3 | 2,745.0 | -8.5% | 2,921.8 | 3,177.6 | -8.0% |
| Natural Gas (mil. of cu. ft.) | 20,210.8 | 23,643.5 | 10.4% | 22,114.6 | 19,762.4 | 11.9% |
| Coal (thous. short tons) | 841.0 | 1,609.0 | 93.0% | 1,388.2 | 912.1 | 52.2% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 786,132 | 802,631 | 2.0% | 849,691 | 837,876 | 1.4% |
| Highway Traffic Count Across State Lines | 28,772 | NA | NA | NA | 37,599 | NA |
| Transient Room Taxes (thous. of dol.) | 1,403.6 | (175.6) | 1075.2% | 362.9 | 463.0 | -21.6% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 288.2 | 345.4 | 1.1% | 1,066.0 | 1,015.6 | 5.0% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 478,468 | 486,615 | 1.9% | 481,313 | 473,476 | 1.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 173,381 | 178,484 | 2.9% | 176,696 | 169,664 | 4.1% |
| Electric Customers (Residential) | 472,502 | 477,257 | 1.4% | 474,058 | 463,904 | 2.2% |
| Electric Customers (Commercial) | 46,333 | 46,468 | 1.5% | 46,343 | 45,444 | 2.0% |
| Natural Gas Customers (Residential & Commercial) | 450,726 | 462,050 | 2.8% | 448,734 | 437,463 | 2.6% |
| Natural Gas Customers (Industrial) | 554 | 543 | -1.1% | 552 | 566 | -2.4% |

# Utah Business Statistics

| UTAH DATA | Feb 1987 | Feb 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Davis County | | | | | | |
| Non-Ag. Employment (thous.) | 51.2r | 50.6fo | -1.6% | 52.9 | 53.5 | 1.2% |
| Unemployment Rate | 6.9r | 5.3 | -5.3% | 5.3 | 4.7 | 12.3% |
| Auth. Permit Construction (thous. of dol.) | 7,697.7 | 7,029.2 | -14.4% | 12,453.7 | 14,586.7 | -14.6% |
| New Dwelling Units (no.) | 75 | 55 | -44.2% | 87 | 186 | -53.2% |
| Postal Receipts (thous. of dol.) | 425.7 | 401.7 | -8.9% | 385.8 | NA | NA |
| Electric Customers (Residential) | 47,204 | 48,142 | 3.5% | 47,530 | 45,557 | 4.3% |
| Electric Customers (Commercial) | 3,249 | 3,362 | 4.8% | 3,309 | 3,263 | 1.4% |
| Natural Gas Customers (Residential) | 49,126 | 50,372 | 3.6% | 49,087 | 46,832 | 4.8% |
| Natural Gas Customers (Industrial) | 52 | 53 | 0.0% | 52 | 51 | 1.8% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 54,473 | 54,849 | 0.7% | 54,860 | 53,374 | 2.8% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,266 | 10,990 | 7.1% | 10,680 | 10,168 | 5.0% |
| Salt Lake County | | | | | | |
| Non-Ag. Employment (thous.) | 327.1r | 332.6fo | 1.2% | 335.6 | 330.7 | 1.5% |
| Unemployment Rate | 6.2r | 5.7 | -4.8% | 5.5 | 5.3 | 2.7% |
| Auth. Permit Construction (thous. of dol.) | 30,670.5 | 21,767.3 | -54.4% | 39,221.7 | 58,434.0 | -32.9% |
| New Dwelling Units (no.) | 233 | 140 | -48.3% | 219 | 489 | -55.3% |
| Postal Receipts (thous. of dol.) | 7,683.5 | 7,525.4 | 8.0% | 7,350.0 | 7,069.8 | 4.0% |
| Electric Customers (Residential) | 237,301 | 240,036 | 1.3% | 236,948 | 232,426 | 1.9% |
| Electric Customers (Commercial) | 20,008 | 20,234 | 3.1% | 20,026 | 19,425 | 3.1% |
| Natural Gas Customers (Residential) | 220,408 | 223,119 | 1.5% | 217,761 | 213,531 | 2.0% |
| Natural Gas Customers (Industrial) | 244 | 231 | -4.1% | 238 | 254 | -6.3% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 225,831 | 229,184 | 1.7% | 227,453 | 223,373 | 1.8% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 108,696 | 110,053 | 1.2% | 110,018 | 108,716 | 1.7% |
| Utah County | | | | | | |
| Non-Ag. Employment (thous.) | 72.5r | 74.7fo | 1.8% | 73.3 | 72.4 | 1.3% |
| Unemployment Rate | 9.0r | 6.1 | -30.0% | 6.5 | 6.7 | -2.6% |
| Auth. Permit Construction (thous. of dol.) | 11,736.9 | 12,070.6 | -26.3% | 12,492.0 | 9,367.0 | 33.4% |
| New Dwelling Units (no.) | 56 | 88 | -50.0% | 93 | 102 | -8.7% |
| Postal Receipts (thous. of dol.) | 999.8 | 1,082.8 | 1.0% | 942.7 | 922.6 | 2.2% |
| Electric Customers (Residential) | 50,195 | 51,740 | 2.7% | 52,291 | 49,935 | 4.7% |
| Electric Customers (Commercial) | 6,365 | 5,907 | -6.1% | 6,207 | 6,191 | 0.3% |
| Natural Gas Customers (Residential) | 60,741 | 62,176 | 2.2% | 60,500 | 59,774 | 1.2% |
| Natural Gas Customers (Industrial) | 67 | 70 | 3.0% | 69 | 71 | -3.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 62,307 | 64,672 | 3.7% | 62,751 | 62,258 | 0.8% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 18,448 | 19,766 | 7.3% | 19,021 | 16,343 | 16.4% |
| Weber County | | | | | | |
| Non-Ag. Employment (thous.) | 60.0r | 60.7fo | 0.5% | 60.8 | 60.1 | 1.2% |
| Unemployment Rate | 7.4r | 6.9 | 2.6% | 7.0 | 6.4 | 9.4% |
| Auth. Permit Construction (thous. of dol.) | 10,434.3 | 4,649.3 | -59.3% | 7,776.3 | 9,915.7 | -21.6% |
| New Dwelling Units (no.) | 63 | 42 | -79.4% | 65 | 83 | -22.4% |
| Postal Receipts (thous. of dol.) | 544.4 | 684.0 | -5.7% | 620.4 | 620.1 | 0.1% |
| Electric Customers (Residential) | 52,686 | 53,547 | 1.7% | 52,976 | 52,025 | 1.8% |
| Electric Customers (Commercial) | 4,808 | 4,896 | 1.9% | 4,867 | 4,759 | 2.3% |
| Natural Gas Customers (Residential) | 49,821 | 50,230 | 1.5% | 49,104 | 48,244 | 1.8% |
| Natural Gas Customers (Industrial) | 83 | 83 | -2.3% | 85 | 86 | -1.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,837 | 46,112 | 0.8% | 46,017 | 45,471 | 1.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,725 | 11,341 | 6.6% | 11,144 | 10,564 | 5.5% |

r Revised fo Forecast Na - Not available

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U. S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics
[2] Obtained from Utah Construction Report
[3] Includes services by nonprofit and religious institutions
[4] Includes public schools and college institutions

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| NATIONAL DATA | Feb 1987 | Feb 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,377.7 | 4,660.9 | 6.5% | 4,535.5 | 4,255.2 | 6.6% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,671.2 | 3,894.7 | 6.6% | 3,785.2 | 3,567.2 | 6.1% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 127.1 | 134.4 | 6.5% | 131.1 | 125.2 | 4.7% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 374.2 | 422.7 | 13.0% | 398.6 | 378.5 | 5.3% |
| Index of Leading Indicators (1967=100) | 185.9 | 191.7 | 2.0% | 190.6 | 181.1 | 5.2% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1982-84=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 111.6 | 116.0 | 4.0% | 114.4 | 109.9 | 4.0% |
| CPI-U (All Urban Consumers) Food & Beverages | 112.5 | 115.8 | 3.2% | 114.1 | 109.8 | 3.9% |
| CPI-U (All Urban Consumers) Housing | 112.4 | 116.6 | 3.8% | 114.9 | 111.3 | 3.2% |
| CPI-U (All Urban Consumers) Transportation | 103.1 | 106.8 | 4.4% | 106.1 | 101.6 | 4.4% |
| CPI-U (All Urban Consumers) Medical Care | 127.3 | 135.5 | 6.0% | 131.5 | 123.6 | 6.4% |
| CPI-U (All Urban Consumers) Energy | 85.6 | 87.0 | 4.2% | 89.0 | 85.8 | 3.7% |
| Producer Price Index (not seasonally adjusted) (1982=100) | | | | | | |
| Producer Price Index, All Finished Goods | 104.1 | 105.9 | 2.1% | 105.7 | 103.1 | 2.5% |
| GNP Price Deflator (1982=100) (qtly.) | 116.1 | 119.4 | 2.8% | 118.0 | 114.6 | 3.0% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 119.3 | 121.3 | 1.8% | 120.1 | 118.2 | 1.6% |
| Total Civilian Employment (mil.) | 111.3 | 114.4 | 2.8% | 112.9 | 110.0 | 2.7% |
| Unemployment Rate | 6.7 | 5.7 | -13.4% | 6.0 | 6.9 | -13.1% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 15,729.4 | 16,247.2 | -13.0% | 20,849.7 | 19,467.8 | 7.1% |
| Residential | 7,920.2 | 7,845.6 | -16.1% | 9,728.6 | 9,737.4 | -0.1% |
| Nonresidential | 5,394.5 | 5,386.1 | -14.0% | 7,209.5 | 6,420.7 | 12.3% |
| Non-Building | 2,414.7 | 3,015.5 | -1.5% | 3,884.9 | 3,309.7 | 17.4% |
| New Dwelling Units (no.) | 112,120 | 98,918 | -29.5% | 125,805 | 140,359 | -10.4% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 5.59 | 8.82 | 8.3% | 6.13 | 5.72 | 7.2% |
| Long Term (30-year Treasury bond yields) | 7.69 | 8.41 | -25.1% | 8.54 | 7.87 | 8.4% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 7.50 | 8.51 | 16.7% | 8.39 | 8.00 | 4.9% |
| Mortgage Rates (new homes) | 8.87 | 8.80 | -4.3% | 8.90 | 9.61 | -7.3% |

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

F.W. Dodge Report, McGraw-Hill: National Construction Data.

Survey of Current Business, U.S. Department of Commerce: New Home Mortgage Rates.

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Indexes.

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# DOES UTAH HAVE A CAPITAL GAP?

*(Includes a discussion of capital programs in Utah and other states)*

Jan Crispin and John Brereton[1]

Utah's entrepreneurs need investment capital. But so do entrepreneurs in Silicon Valley or Route 128 or any one of a dozen established or emerging high tech centers. The search for investment capital is an ongoing odyssey for entrepreneurs everywhere. To provide some insight into this search, this study discusses the issues surrounding risk capital in Utah. The objective is to identify the components of risk capital and the environment that attracts such money. It also discusses the array of financial (and non-financial) resources that are available to the Utah entrepreneur and the appropriateness of each given the nature of Utah's high tech sector.

Risk capital is commonly called venture capital. Its purpose is to provide small, usually technology-oriented firms with the money needed to manufacture and market a technology-based product. In return, the provider of this money generally takes an equity position in the firm hoping to make a large profit when the company "goes public". It is a widely held belief in many states actively pursuing high tech development, that the lack of venture capital is the only missing component in the potential emergence of a "Silicon Valley II" in the area under discussion. It is within this framework that Utah's venture industry is discussed.

## Overview of Venture Capital in Utah

Utah's venture capital industry is young. Perhaps the state's earliest attempt at assisting entrepreneurs was the formation of the Utah Innovation Center (UIC) in 1978. Certainly, high tech firms had already been financed by venture capital prior to this date, but these investments were made by out-of-state venture firms, or by individuals

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[1] Jan Crispin is a research analyst at the Bureau of Economic and Business Research; John Brereton is president of The Brereton Group and collaborated on this project in a consulting capacity.

This is the second in a two-part series dealing with the issue of venture capital and financing in technology-oriented firms. These papers are part of a broad study of Utah's high technology sector. Funding for the study has been provided by the Centers of Excellence Program, Utah Technology Finance Corporation, and the University of Utah. This financial support is sincerely acknowledged.

on an informal basis. Although UIC was not a true venture investor in the strict sense of the role, it provided the entrepreneur with incubator services which may have otherwise been beyond the young firm's resources. And while the Center did not directly provide money to these fledgling firms, it did assist them in locating risk capital. The formation of UIC was really the first step in the formation of the state's venture industry.

If the formation of the Utah Innovation Center is recognized as a watershed, then technically Utah's venture industry is only 10 years old. To put this in perspective, banks such as Citicorp, Bank of America and First National Bank of Boston were providing equity dollars to entrepreneurs through the SBIC program in the 1960s -- a time when Utah's venture market was virtually nonexistent.

In 1983, the Utah State Legislature established the Utah Technology Finance Corporation (UTFC) to provide funding and support for Utah entrepreneurs. The UTFC program received an initial funding level of slightly more than $2 million. Under the program's guidelines entrepreneurs could receive up to $50,000 in grants to pursue the development of an idea. In 1985, this program was challenged by the state attorney general and did not resume activity until 1986.

It was 1986 before the state had a Utah-based, private venture capital fund -- Utah Ventures (formerly Utah Technology Venture Fund I). Another private fund called Eagleplace Partners was established in 1987. At present, these two private venture capital funds manage approximately $4.5 million. Comparatively, prominent venture centers like Boston, New York and San Francisco have a 20-to 25-year head start on Utah's venture industry, and secondary centers like Chicago and Philadelphia have a 10- to 15-year jump.

While Utah's venture capital industry is young, its venture infrastructure is even younger. Only recently have technology-oriented accounting, law, marketing, and consulting firms emerged in the local market. One company president who had just moved from Silicon Valley to Utah to head a high tech firm put it this way: "All I had to do [in California] was drive from my home to my office, and I would pass the world's largest and most active venture capital firms, the best marketing firms, dozens of legal and accounting firms that specialize in high tech services. And my home was only 30 minutes from my office."

On the bright side, Utah's venture capital industry, especially that segment involved with funding seed/idea companies and young startup companies, has grown very rapidly in the past ten years. Much of this growth has been in response to a R&D environment which is much older, and to a surge of entrepreneurial activity.

## Size of Utah's Venture Capital Industry

Because the venture industry in Utah is a relative newcomer, it is not surprising that the dollar volume of venture capital is small. There are no $50 million funds or even $10 million funds in the state. The largest single local fund is $4 million managed by Utah Ventures. Eagleplace Partners, another private venture fund, has raised $800,000. This venture manager, as well as others in the state, is trying to raise additional dollars for venturing. For now, however, there are very few dollars to spread over an increasingly large entrepreneurial base.

## The Implication of Size on Utah's Venturing Capabilities

The modest dollar volume of Utah's venture industry creates some problems for local entrepreneurs. First, small firms must rely on out-of-state venture investors. They must attract investors who may already have an enormous number of opportunities closer to home. A typical venture investor, for example, receives hundreds of proposals every year from high tech firms requesting capital. While the industry practice of co-investing brings in dollars from all over the country, it is clear that local entrepreneurs and fund managers must make inroads into the national venture market if they are to attract sufficient risk capital.

Secondly, when a local venture investor does invest in a home grown high tech firm, by necessity, the capital infusion must be small. The funding level range of Utah Ventures illustrates this point. First round financing by this fund manager ranges from $50,000 to $250,000, yet average financing by independent venture firms for early stage companies is $2.3 million. Using the national funding levels as a guideline, Utah Ventures, the state's largest fund could finance just two deals without outside participation. Again, local fund managers do leverage their investment through co-investing; and while this strategy helps, it is difficult to act as a lead investor in very many deals without significant capital increases.

Finally, given their limited capital resources, local fund managers must be extremely selective in their investment process. Unlike a $50 million fund, a small fund cannot tolerate serious losses. The average industry failure rate of 60 percent is fatal to a small fund with a small portfolio. At the same time, because of size, Utah funds have a difficult time facing the challenge of adequately diversifying their portfolios. This deters potential institutional investors.

## Is There Enough?

One of the most controversial issues surrounding high tech development in Utah is the perceived lack of risk capital. "Is there enough?" is probably the most commonly asked question regarding venture capital in Utah. Every business person, venture capitalist, entrepreneur and high tech executive interviewed for this study had an opinion, most often, a very strong opinion on this topic. A small percentage of those interviewed felt there was an adequate supply of venture capital. They generally tempered this statement by admitting that it may be difficult to get, but nonetheless, money is there for worthwhile projects. Most others, however, voiced a different opinion. They believed that there are too few venture dollars chasing too many deals. With few exceptions, they cited the Joint Economic Committee (JEC) study on *Venture Capital and Innovation* study as the definitive evidence for the regional capital gap.[2] Assuming that Utah does have a capital gap it is important to understand why this is the case.

### Geographical Discrimination?

Venture capitalists located outside the state would agree with their local counterparts that areas or regions have differing levels of ability in attracting venture dollars. When asked in the JEC survey, "Do entrepreneurs in some states and regions have more difficulty in attracting venture capital than entrepreneurs with comparable deals in other states and regions?" the overwhelming majority said, "Yes"; (corporations - 95%, private venture firms - 93% and, Small Business Investment Companies (SBIC) - 88%). When asked to rank either state or regional access to venture capital as "Excellent or Good", the Mountain and Plains region ranked last by both the SBIC and independent venture funds, and eighth out of eleven by corporate funds.

The JEC study also reported that independent venture capital firms invest about 36 percent of their funds in companies within a 50-mile radius of the home office, 17.7 percent within a 50- to 200-mile radius, and 36.1 percent beyond a 500-mile radius. The percentages were slightly different for SBIC and corporate venture funds.

As evidenced by recent investment patterns, proximity to venture markets does influence investment patterns. Venture capitalists are more likely to invest close to home, and for most of them, home is in the northeast section of California. There is less agreement among venture capitalists as to the importance of proximity as a deciding (not influencing) factor in the investment decision. In an informal telephone survey, selected venture capitalists were asked if they would considering an investment in a Utah firm. Without exception, all of those questioned answered "Yes". It is recognized that the question invited a yes response as the venture investor had nothing to gain except adverse publicity or missed opportunity by responding negatively. However, the investor went on to say that they had investments in many companies throughout the nation and that location in and of itself is not a deciding consideration. If actions speak louder than words, then this seems to be the case. Several prominent outside venture capital firms have already invested in Utah companies.

Economic theory reasons that location can indirectly influence investments. Investing in a Utah firm, for example, may result in higher investment costs. These costs range from higher information costs to increased traveling expenses as well as intangible costs such as time. Time is an important cost to venture capitalists. He or she can only manage so many investments, so there is an incentive to either invest close to home, or to group the investments geographically. Therefore, to compensate the investor for the added time spent, the deal must offer more than if it were located closer to the investors "home base". The investor may require that the company be more mature, or that it have the potential to earn a higher rate of return. The investor is acting rationally and although a higher rate of return may be required for Utah deals, this is not necessarily a discriminator; a more appropriate term would be disadvantaged, and an important difference exists between being discriminated against and being disadvantaged.

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[2] Joint Economic Committee, "Venture Capital and Innovation," A study prepared for the use of the Joint Economic Committee Congress of the United States. (U.S. Government Printing Office, Washington, D.C. : 1985) December 28, 1984.

## Are There Enough Good Deals?

Out-of-state investors place more emphasis on the availability of good deals than on geographical proximity as an explanation for the access to venture markets. Regional differences in the availability of good deals was the most significant reason for regional variation of venture dollars in the JEC study. There is little disagreement among venture capitalists as to the main features of a good business deal. In order, management, innovation, and market potential are the key characteristics.

Local investors interviewed for the report said there were plenty of high tech opportunities in Utah. They also volunteered that most of these deals lack one or more of the essential ingredients that make a good deal. This weak link generally is on the business side rather than the innovation side. Many high tech companies in Utah lack the business experience and expertise that venture investors require.

The majority of founders interviewed agreed with this assessment. "We are engineers, not MBAs," was said more than once during many of these interviews. There are other clues that the innovation expertise is ahead of business acumen. For example, most local venture capitalists spend much more time with a company than the average reported by other venture investors. Second, many of the new innovations that lead to a new high tech company are pursued on an incremental basis. This approach usually leads to weak business planning by the part time entrepreneur. Third, the research and development capability in Utah's high tech sector is far ahead of its business or commercial development. This headstart reflects many factors: the role of the universities; the lack of capital; a dearth of homegrown, successful high tech companies; and importantly, a lag in entrepreneurial awareness. One venture firm said it had identified 180 potential high tech firms as possible investments and that it could fund at least four or five deals every month if the capital resources were available.

On the other hand, the number of good deals in the state is possibly overstated. Assuming that the capital market is efficient, and the evidence is such to support this assumption, money will find the good deals. Although there is unquestionably a large amount of innovative and technological activity in the state, even with an infinite amount of capital, not every good idea, new innovation, or cutting-edge technology will result in a viable product.

## Management

Management is a multi-faceted issue. It is a prime consideration in attracting venture capital to the area. From the perspective of a venture capital fund, it takes the form of the management capability of the founder/entrepreneur. From the perspective of the institutional fund, it is the issue of a fund manager's track record.

**Management of the Company** – One of the deciding factors in the investment decision is the capability of the high tech firm's management team. The strength of this team will determine the amount of time an investor must spend in order to safeguard his investment. The better the team, the less day-to-day involvement will be needed by the investor. This will cut the costs associated with the investment and ultimately will make the company a more likely candidate for venture funds. While investors do take an active role in the company, daily management activities are left to others.

A distinctive characteristic of Utah's venture industry is its involvement with management. Local venture capitalists are much more involved with their portfolio companies than the typical venture investor. This involvement goes beyond the strategic issues such as marketing and follow-on financing. Local investors tend to be involved in virtually every aspect of the company's development. From an industry perspective this is unusual. Such extensive involvement may reflect the need of local investors to ensure a higher success rate than industry standards, or it may reflect a lack of management acumen by local entrepreneurs, or possibly it may mean that the local venture groups are getting involved in the company too early.

**Management of the Fund** -- As a young capital market, local venture investors are just now acquiring the track record necessary to attract large institutional investors. Investors such as pension funds, insurance companies, and corporations rely heavily on a fund manager's track record as a barometer to measure his or her future success. This explains why experienced managers are in demand

and why inexperienced managers have a difficult time attracting funds. For example, industry veterans, defined here as fund managers with more than 10 years of experience, manage the bulk of pension funds and are the most successful in raising new funds. For all of 1986, experienced managers raised 74 percent of the total capital. On the other hand, inexperienced managers struggle to gain inroads into the institutional market and to raise dollars for new funds. This situation is common to all investment management; all newcomers face the same hurdle. As Utah fund managers become more experienced, their ability to raise additional money will be enhanced.

## Programs Available in Utah

Although Utah's venture financing industry is young, notable efforts and achievements have been made in developing and nurturing capital for fledgling high tech companies. The following discussion includes a brief description of the programs currently underway and the level of investment that each program is willing to fund.

### Seed/Early Financing

As mentioned in the venture capital section, the venture capital industry is not a likely funding source for companies at the pre-startup and seed stage. Such companies have an idea and little else. They are seeking capital to prove their idea or innovation through R&D. Without a business plan or management team it is difficult for an outside investor to evaluate the commercial potential of the innovation. Another barrier is the rate of return required by the venture investor. Because an investment in a seed company extends the investment horizon, the potential return or profit must be significantly higher than for a shorter horizon and less risky investment. An independent venture capitalist may well require a 75 percent compound rate of return on a venture investment for seed and pre-startup. Very few companies at the seed stage can demonstrate this level of return.

If other venture capital markets steer away from seed and pre-startup companies, or early-stage companies, venture firms in Utah seem to thrive on them. Several venture firms, especially incubator firms, specialize in seed investments. The Utah Innovation Center, Genexus, and Utah Technology Finance Corporation all specialize in seed investments. Even Utah Ventures leans toward financing younger firms, acting much like a feeder fund for larger out-of-state venture partnerships. Utah Venture's initial funding level of $50,000 to $250,000 works well for companies at the seed or early startup stage. The federal SBIR program is another source of seed money for Utah firms. These and other programs are discussed below.

### Utah Technology Finance Corporation (UTFC)

Utah Technology Finance Corporation is a state-chartered, non-profit organization established in 1983 to encourage high-growth technology-based business in Utah. The funding objective of UTFC is to provide these high growth research opportunities with funding, entrepreneurial support, and assistance in securing follow-on funding from private investors and venture capital firms.

To help entrepreneurs secure initial funding, UTFC established the Utah Small Business Innovation Program (SBIP). Under the auspices of SBIP, small companies which show promise for commercial success and growth can receive funding ranging from $30,000 to $50,000. These monies can be used for research, prototyping, testing or refinement (including direct expenses and overhead). UTFC does not charge interest on these funds; rather, it takes a royalty position of 3 percent on sales arising from a successful program. The obligation continues for six years or until the funding is repaid three times. UTFC has provided a total of $2.2 million to 44 different high tech firms in Utah. A list of these firms is shown in Table 1.

UTFC also administers the "Utah Partnership" program. Under this program, UTFC will participate with private or public economic development entities by providing $50,000 or 40 percent of a Local Innovation Fund (LIF). The entity provides the remaining 60 percent for a LIF total of $125,000. Current partnerships exist with the Bear River Association of Governments, the cities of Orem and Provo, Ogden City/Weber county, and San Juan county/College of Eastern Utah.

Over the years UTFC has expanded its role in helping the Utah entrepreneur, by organizing a participating loan program with the area's largest commercial banks to provide additional funding for firms. Under this loan program, UTFC participates with local banks in providing loans to small high tech firms. UTFC's participation is limited to 30 percent of the loan while the bank provides the remaining 70 percent. Loan disbursement and repayment is on the basis of UTFC funds being "first in and last out". In addition, the UTFC position would

### Table 1
### Recipients of Utah Technology Finance Corporation Awards

**Round 1**

Lee Scientific
Farmington Bay Robotics
Bonneville Scientific

**Total Awarded:**
**$201,000**

**Round 2**

Alton Dean Medical
Hart Scientific
Medical Physics
Radius Engineering
& Tooling

**Total Awarded:**
**$171,000**

**Round 3**

Bioactives
Bio Process Systems
Multilayer Optics
Pan Agro, Inc.
Enhanced Engineering
High Tech, Inc.
Medical Physics, Inc.
Harding and Harris
Theratek, Inc.
MIDMID, Inc.
Bonneville Microelectronics
Reliance Technologies
NPI
VaporFab, Inc.
JMW Acquisition
Enduratek

**Total Awarded:**
**$881,000**

**Round 4**

Advanced Holographics Corp.
Aggra-Insulate Marketing
Axonix Corp.
Cache Valley Technology, Inc.
Canyon Medical Products
Capital Solutions, Inc.
Ceramatec, Inc.
Teca, Inc./Terra Tek
Globesat, Inc. (2 awards)
H.B. Imaging, Inc. (2 awards)
International Healthcare
Consulting Group
Royal Pharmaceutical Corp.
Pan Agro, Inc.
Lumitekk
Ontrack
Rust Automation
Equipment
TSA, Inc.
GBMA, Inc.
Tronac, Inc.
VaporFab, Inc.
Lee Scientific

**Total Awarded:**
**$1,000,000**

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be subordinate to the bank position. Three high tech firms in Utah have taken advantage of this special program.

### Small Business Innovation Research (SBIR)

One program local entrepreneurs are using successfully to fund initial research and development is the Small Business Innovation Research program (SBIR). Although this program is not a venture arrangement, its financial contribution has become very important to Utah's entrepreneurs. The SBIR program provides needed dollars to local high tech companies. As one high tech executive exclaimed, "It is like money from heaven. We are paid to do something we would do anyway."

The SBIR program came into existence in 1982 with the enactment of the Small Business Innovation Development Act. On October 1986, the program was extended through September 30, 1993. The act requires federal agencies with research and development budgets in excess of $100 million to establish a SBIR program. The objective of the program is to help small firms compete for federal contracts. At present there are 11 federal agencies participating in this program. Since the SBIR program began in 1982, a total of 5,713 Phase I and 1,266 Phase II funding agreements have been awarded throughout the United States.

Under the law, the SBIR program is a three-phase process. Phase I grants are based on proposals solicited by one of the 11 participating agencies. These solicitations contain research topics that are of interest to a specific agency. Firms are invited to submit proposals that address the research topic request. The object of this phase is to determine both the technical feasibility of a proposed project and the quality of research that the small firm can provide. Awards of up to $50,000 are given for a six-month research effort by the selected company. Those companies which successfully complete Phase I projects can compete for Phase II funding to further develop the proposed idea. Phase II is the principal R&D effort. These grants are used to expand the results of the initial development and are based upon those results and the technical merit of the Phase II proposal. Most awards for Phase II are expected to be between $200,000 and $500,000. The duration of the award normally does not exceed two years.

Phase III is conducted by the business to pursue commercial applications of the R&D conducted in the previous two phases. Non-federal funds, including those obtained through exercising the follow-on funding commitments are emphasized in Phase III. Phase III may also involve follow-on, non-SBIR funded R&D or production contracts with a federal agency.

### Table 2
### Utah Companies Receiving SBIR Grants
### Phase I and Phase II

| Company Name | Phase I | Phase II | Total Amount Awarded |
|---|---|---|---|
| AMTEK Corp. | 1 | 0 | $ 50,000 |
| Biomaterials, Int. | 6 | 0 | 340,000 |
| Bonneville Scientific | 6 | 4 | 1,445,796 |
| BSD Medical | 1 | 0 | 49,960 |
| Ceramatec, Inc. | 7 | 6 | 1,586,000 |
| Collision Safety Engineering | 1 | 0 | 49,750 |
| DMS Systems | 1 | 0 | 45,665 |
| Daedalus Research, Inc. | 1 | 1 | 349,909 |
| Deseret Research Company | 5 | 2 | 706,077 |
| El Dorado Engineering, Inc. | 1 | 1 | 96,676 |
| HEC Software, Inc. | 1 | 0 | 30,000 |
| JTP Radiation, Inc. | 1 | 0 | 49,993 |
| Lee Scientific, Inc. | 4 | 2 | 520,642 |
| Megabar Corporation | 2 | 0 | 196,918 |
| Mesa Corporation | 1 | 0 | 49,822 |
| NPI | 11 | 2 | 584,380 |
| Ralcon Company | 2 | 0 | 104,608 |
| Rocky Mountain Research | 1 | 0 | 50,000 |
| Rogers & Assoc. Engineering | 4 | 1 | 345,532 |
| Sitar, Inc. | 1 | 0 | 49,920 |
| Space Systems Engineering | 3 | 1 | 355,617 |
| Strat Company | 1 | 0 | 48,858 |
| Technical Research Assoc. | 22 | 1 | 1,323,098 |
| Techniscan | 1 | 0 | 50,000 |
| Terra Tek, Inc. | 2 | 1 | 321,265 |
| Therapeutics Technologies | 1 | 0 | 45,850 |
| Topical Testing, Inc. | 2 | 0 | 100,000 |
| Utah Geophysical, Inc. | 2 | 0 | 100,000 |
| Waterford Testing Center | 1 | 0 | 46,127 |
| Total | 93 | 22 | $9,092,463 |

Note: Data do not include awards made in 1982. Information is unavailable.

Source: Small Business Administration, Office of Innovation Research and Technology, Small Business Innovation Program.

Any independent, for-profit small business with 500 or fewer employees can participate in the SBIR program. This includes sole proprietorships, partnerships, joint ventures, associations, or cooperatives. Non-profit organizations are not eligible. The principal investigator for each project must spend more than one-half of his or her time employed by the firm receiving the award. During Phase I, a minimum of two-thirds of the research and/or analytical effort must be performed by the proposing firm.

Since the program's inception, Utah firms have won 127 SBIR awards totaling $10.6 million. In FY1986 alone, Utah firms were awarded 43 SBIR grants representing more than $4 million in research and development funds. Furthermore, there is an emerging trend which portends well for Utah's high tech firms. Utah firms are winning Phase II grants in increasing numbers. In 1985, only three Phase II grants were awarded to Utah firms. In 1986, this number jumped to 11, or 26 percent of all Phase II SBIR grants awarded for the year. This improvement suggests Utah firms are developing a more sophisticated [illegible], commercially-oriented research community. If this trend continues, it will boost Utah's reputation in the national venture capital industry. Of all the financing options in Utah, the SBIR program is the most successful in supplying young high tech companies with research dollars. A list of companies securing Phase I and Phase II SBIR grants is shown in Table 2.

#### Eagleplace Partners

Eagleplace Partners is a relatively new venture fund in Utah. Beginning as a consulting firm to high tech companies, Eagleplace Partners has recently raised an $800,000 investment fund. The firm has plans to initiate a larger fund in the near future. Although Eagleplace has not yet engaged in venture financing, its plans are to invest in high growth companies at an early stage. Eagleplace Partners' investment strategy closely parallels that of the national definition for early stage financing. The company anticipates a typical financing range per company to be between $100,000 and $500,000. Furthermore, the fund plans to assume a management-intensive orientation that will allow for management involvement with its venture companies on a daily basis.

#### Utah Innovation Center/ Utah Innovation Associates

The Utah Innovation Center (UIC) was conceived and formed by the University of Utah under the direction of Dr. Wayne Brown. The Center was originally funded by the National Science Foundation; however, funding by this agency was terminated resulting in the inability of the University to continue future operations of the Center as a nonprofit entity. As a result of this change, Dr. Brown reorganized the Center as Utah Innovation Center, Inc., a profit-oriented organization formed to assist, promote, develop and market high tech development and ideas.

Affiliates of Utah Innovation Center Inc. constructed three separate buildings in Research Park at the University of Utah which were leased to the Utah Innovation Center Inc. and to entities attracted to or established through the efforts of the Center. UIC has the resources to assist between six and 12 young high tech firms at any given time. Presently, there are only a few firms housed at the Center; however, according to the assistant director, the Center is currently considering the addition of several new firms.

Although the UIC is a privately-held corporation, a related company called Utah Innovation Associates (UIA) was formed in 1986 by the owners of the Center. UIA is a publicly-traded company formed "to assist in the creation, development, growth and financing of newly formed or developing businesses which are involved with the products and services derived primarily from high technology research and development."

UIA through its affiliation with UIC, has an investment position in the following companies. Although not a complete list, the following represents companies incubated at the Center:

Axonix Corporation -- Develops battery-powered portable printers.

Bunnell, Inc. -- Develops a high-frequency jet ventilator for newborns and infants.

EDL, Inc. -- Provides ultrasonic nebulizers for use by sufferers of asthma and bronchitis.

Globesat, Inc. -- Develops low-orbiting satellites.

Basically, UIC and UIA are related companies acting as innovation centers. Both of these entities are profit-oriented, although their financing relationship with those companies housed in the center is slightly different. As stated in the UIA prospectus, the organization intends to provide services to fledgling high tech companies for fees, as well as equity interests in such companies. UIC relies primarily on equity participation for its return.

Public and private sector innovation centers offer similar services to a young high tech firm. Both provide office space, conference facilities, and both offer a variety of services like accounting services, secretarial support and sometimes computer equipment and health and other benefit packages. Additionally, the objectives for both are the same; that is, to assist young high tech companies. There are, however, two important differences which separate a public center like a university-related incubator and a private center like the Utah Innovation Center. A private center is profit-oriented. Regardless of how the venture arrangement is structured, its goal is to make a profit. A publically-managed incubator is not profit-driven. Its goals may include the development of a technological center, the stimulation of entrepreneurship, new job creation, or economic development. While these goals may be important to a private incubator, they are secondary.

The second major difference between a public and private incubator is their source of funds. Public incubators rely on public monies; private incubators rely on private investors, including venture capitalists.

### Genexus Inc./Genexus International

The principals of UIC formed Genexus and Genexus International in 1985 to assist in the development of innovation centers and incubators in other high tech communities. These firms provide consulting services to universities, communities, and others seeking to establish innovation centers. Genexus has been involved in the development of innovation centers in several locations, including Utah State University in Logan, Utah; Florida Atlantic University, Boca Raton, Florida; the Tennessee Innovation Center, Oak Ridge, Tennessee; and an innovation center in Worchester, Massachusetts. Genexus plans to have 15 centers operating worldwide by 1989.

Seed financing of $25,000 to $50,000 is available through Genexus. The firm also arranges financing with out-of-state venture capitalists. Much like other local venture firms, Genexus is very involved with the daily management of the companies in which it invests.

## Later Stage Financing

At the opposite end of the financial spectrum in Utah, few local venture firms are involved with later stage financing; that is, companies at the second or third stages. One local venture investor explained it this way: "A local entrepreneur can find seed and early startup financing. There seems to be plenty. And if his company is successful, he has little trouble going public or merging. So we have both ends -- seed and fourth stage -- covered. What is missing is the middle financing; the second and third stages. There is an enormous gap between seed and going public. That's the problem."

Nationally, the average investment for second stage and later stage funding is over $3.8 million. Even with a local firm acting as a lead investor, there simply are not enough later stage dollars.

### Utah Ventures

Utah Ventures (UV) is a venture capital limited partnership formed in 1986. The stated objective of the partnership is "to make investments in early stage, growth-oriented, high technology companies which offer potential to generate exceptional investment returns." The funds' capital totals $4 million. Utah Ventures is a venture fund, relying on equity participation. It assists in the management of the company on strategic issues (especially finance). The fund has acted as a lead investor. The initial investment can range from $50,000 to $250,000; often the fund will make a small initial investment and then make follow-on investments as needed.

Venture capital partnerships are the most commonly used vehicle for venture investments. Under this format, the general partner, usually the manager of the fund or the venture capital firm, manages the partnership's investment portfolio. The fund's limited partners, or its investors are passive.

Utah Ventures specializes in the funding of young growth companies primarily as a "feeder fund." The partnership's investment criteria focus on firms in the Utah region that specialize in technology-based products or services. To date, UV has invested over $1 million in seven Utah high tech companies. This investment has drawn capital commitments from outside venture firms totaling $18.4 million. A list of these firms and the total capital committed is shown in Table 3.

Table 3

Firms Receiving Utah Venture Funds

| Firm | Capital Committed |
|---|---|
| Anesta Corporation | $ 680,000 |
| Axonix Corporation | 1,400,000 |
| Cardiopulmonics | 2,300,000 |
| Clyde Digital | 3,100,000 |
| Motion Control | 1,500,000 |
| VaporFab | 150,000 |
| Westronixs | 9,000,000 |

### Banks and Financial Institutions

Venture capital is only part of the finance puzzle for companies at the later stage, or even for companies at the early and seed stages. Venture capital bridges a gap by providing risk capital. However, as lenders, banks play the most important role in the development of a community's economy, including its high tech sector. Most high tech firms need banks for conventional financing, especially during the expansion stage. Yet, most banks are wary of high tech firms because they find the technical component of the business difficult to understand. Adding to the bank's caution is the fact that most high tech firms lack the financial capacity and the asset position required under conventional underwriting for loans.

Local presidents and CEOs of emerging high tech firms gave Utah banks mixed reviews. Most of the executives interviewed felt the local banking community lacked an understanding as to their company's business and financial needs. Several local venture capitalists expressed much the same opinion.

Banks everywhere are confronting the problem of meeting the special needs of high tech firms. Only a few have found a solution. It is not surprising that those banks that have found solutions are located in the most successful high tech centers. The Bank of Boston, for example, has become a leader in high tech finance. The solution in this case began with a commitment by the bank to understand the technical component of these special firms. It is much easier for an engineer-turned-entrepreneur to discuss his financing needs with an engineer-turned-banker or a banker who understands the development cycle of a high tech company than someone who knows little or nothing about technology.

**Table 4**
**Overview of Utah's Financing Options for Technology Oriented Firms**

*Later Stage Financing Options*

| | | | |
|---|---|---|---|
| Utah Ventures Inc. | Banks | Independent Investors "Angels" | Certified Development Companies |

*Early/Seed Financing Options*

| | | | | | |
|---|---|---|---|---|---|
| Small Business Innovation Research | Utah Technology Finance Corporation | Utah Innovation Center | Genexus, Inc./<br>Genexus, Int. | Certified Development Companies | Independent Investors "Angels" |

Source: Information compiled by the Bureau of Economic and Business Research from various documents.

The issue does not appear to be whether the local banking community or another institutional investor is risk adverse. Local banks have been aggressive lenders to other industries in the past, and several local banks are already reaching out to the high tech community as lenders and investors. If there is an all-important issue, it seems to be one of full commitment. Without the support of the banking community, Utah's high tech sector cannot reach its potential. As mentioned, Silicon Valley and Route 128 owe as much of their success to the banking community as to their proximity to universities. A commitment between a lender and a borrower is a two-way street. Not only must the finance community commit to high tech, but high tech must commit to the financial community. Advocates of high tech must help the banks overcome their wariness by drawing them into the high tech community at every possible opportunity.

### Certified Development Companies

Certified Development Companies, (the SBA 503/504 program) provide another means for local entrepreneurs to obtain financing for their high tech ventures. The 503/504 programs are federally financed programs which offer special incentives to the entrepreneur. The loans are provided at a fixed rate for a longer period than most other loans. Banks are involved in this program by providing 50 percent of the funds; SBA guarantees 40 percent of the loan and the borrower provides the remaining 10 percent. The loans are originated through a certified development company. Currently, Utah has three Certified Development Companies.

An overview of the financing structure and options for Utah's technology-oriented firms is detailed in Tables 4 and 5.

## Other Possibilities

While the programs discussed previously are actually on-going, the state has two other programs that serve the high tech sector in a more unobtrusive and indirect manner. These are the Utah Retirement Fund and the Centers of Excellence Program.

### Utah Retirement Fund

Utah Retirement Fund (URF) is the largest venture investor in the state of Utah. According to "Pension and Investment Age" the Utah retirement fund ranks 45th in the nation as a venture investor. URF recently increased its commitment to venturing activities. The fund has allocated approximately 3 percent of the retirement fund or about $90 million for future venture investment. To date, a total of $32 million has actually been committed to 13 venture

## Table 5
## Characteristics of Financing Options

| Organization | Funding Stage | Funding Type | Financing Limits | Business Services | Status |
|---|---|---|---|---|---|
| SBIR Program | Early/ Later | G | $50,000<br>500,000 | N | F |
| UTFC | Early | D | 50,000 | Y | S |
| UIC | Early | E | NA | Y | P |
| Genexus, Inc. | Early | E | 25,000<br>50,000 | Y | P |
| Certified Development Co's. | Early/ Later | D | NA | limited | P |
| Independent Investors | Early/ Later | E | NA | possibly | P |
| Utah Ventures | Later | E | 50,000<br>250,000 | Y | P |
| Eagleplace Partners | Early | E | 100,000<br>500,000 | Y | P |
| Banks/Financial Institutions | Later | D | NA | N | P |

Code:
Early -- Early/Seed Stage
Later -- Later Stage
NA -- Not Applicable
G -- Grant
E -- Equity
D -- Debt
F -- Federal Agency
S -- State Agency
P -- Private
Y -- Yes
N -- No

fund partnerships. These partnerships are managed by out-of-state venture firms.

URF selects its venture partners carefully. The selection process relies on the experience and track record of the venture firm. Like most pension funds throughout the nation, URF recognizes the opportunities of venture investing but is also constrained in pursuing those opportunities. This dilemma creates a unique role for URF and all pension funds. Having a fiduciary responsibility to the contributors of the retirement fund, URF feels it must select only the most experienced managers. As a result, none of the venture funds are managed by local firms; however, local investment advisors do manage equity and bond investments for the fund.

URF is a passive investor; that is, the full responsibility of investing falls on the venture fund manager (according to specific guidelines approved by URF). Once the funds are committed to the fund manager, URF is not involved. This is a typical structure in the industry. If any money returns to the state in the form of a venture investment, it is coincidental. However, money has flowed back into Utah. Nice Corporation, an Ogden-based company, is one example of a Utah firm receiving URF money from an outside firm.

Pension funds, on the whole, make excellent venture investors, with a long term investment horizon and long term objectives. Both of these characteristics fit venture investment. Pension funds can make steady capital contributions and at the same time do not require capital withdrawals; again, this fits well with investment venture criteria. Lastly, pension funds need not rely on cash streams, in the form of dividends from their venture investments.

### Centers of Excellence

Modeled after the National Science Foundation's University-Industry Cooperative Research Centers program, the Centers of Excellence Program (COEP) provides matching funds for interdisciplinary applied research and development programs. COEP was funded in 1985. The program has three goals:

1. To accelerate the growth of targeted technologies by catalyzing interdisciplinary research activities within Utah's colleges and universities;

2. To stimulate and assist the translation of research product from university laboratories into Utah's economy; and

3. To enhance the image of the state as a center of technology-based industry.

COEP has identified seven areas of technology that can have a major economic impact on the state. Twenty-two centers have already received research contracts and grants from a combined total of 123 private companies and 14 federal agencies and research institutions. Based on the current level of private funding and involvement in the program, the COEP has been very successful attracting research dollars to Utah. Published information shows that the $2.5 million funded for the program has created $38 million of research support.

While COEP does not invest directly in Utah high tech companies, its existence sends out the message to private industry that universities and colleges in the state are actively pursuing university/industry linkages.

## What Are Other States Doing to Finance High Tech Growth?

States throughout the country are dealing with problems and issues similar to those faced by Utah entrepreneurs. The diversity of solutions is both overwhelming and unique. While the effectiveness of a particular program will vary from region to region, an awareness of different programs can only serve to broaden the options for the state of Utah.

### Small Business Investment Company (SBIC)

One financial institution overlooked until recently by the local financial community that could help high tech companies and other small firms, is the Small Business Investment Company (SBIC). At the present time Utah does not have an SBIC. Yet, five of the ten largest venture capital firms in the nation are SBICs.

The SBIC is a privately-owned, profit-motivated business, organized under the conditions of the Small Business Investment Act of 1958. SBIC is licenced and regulated through the SBA. The SBIC derives its initial capitalization from private sources and normally becomes eligible to obtain funds from either the federal government or from private financial institutions (banks) through government guaranteed loans. Under this program, the SBIC with private capital totaling at least $1 million may receive up to three guaranteed debenture dollars for each dollar of private capital raised. In addition, the SBIC with at least 65 percent of its total funds available for investment invested in venture capital can receive an additional fourth dollar of leverage per dollar of private capital. In 1986, two-thirds of the dollars dispersed by SBICs were in the form of equity-type financing.

As a regulated entity, the investment policies of SBICs are much more restrictive than those of any other venture capital institution. These restrictions can, however, be a blessing when there is a full range of alternative venture capital sources. For example, SBIC funds are less likely to co-invest than independent or corporate venture funds, and they are also less likely to be involved with the management of the company. In this respect they act more like a lender than an owner. Companies receiving SBIC investments are less likely to go public and more likely to operate and grow through internal or self-funding. The hurdle rate for an SBIC venture investment is usually lower than for other venture investments. These differences provide an alternative to the entrepreneur who is not attracted to the private venture capital fund.

A good example of a high tech SBIC is the New England Capital Corporation (NECC). This SBIC is a venture capital affiliate of the Bank of New England and Connecticut Bank and Trust. Currently, the fund totals $15 million. NECC's portfolio includes companies in various industries, stages of development, and locations. Areas of special interest include communications, robotics, computers and software.

In 1986, NECC invested $3.6 million in 14 new and existing companies; and through July of 1987, it invested another $2 million in four new companies.

Utah does not have an SBIC office, even though there is a demand. According to Kent Moon, director of the local SBA office, $23 million in loans have been made to Utah businesses by out-of-state SBICs. In response to this unmet demand, the Salt Lake Chamber of Commerce and the local SBA office have initiated a study to determine the legal ramifications of the Chamber creating a SBIC. Whether or not the Chamber is the best entity to sponsor a SBIC, such action is commendable and needed. Utah's small business and high tech sectors are disadvantaged by not having a local SBIC. Not only are high tech firms having to go outside the state to get SBIC funds, but the absence of an SBIC in Utah could be sending the wrong message to the capital markets. Regardless, the absence of an SBIC in Utah is yet another contributing factor in the capital gap.

### CID (Indiana)

The Corporation of Innovation Development (CID) is a privately-owned venture capital investment company founded in 1981 with the objective of making direct investments in Indiana corporations. What makes CID unique from other state-initiated programs is that it used investment tax credits as the vehicle to raise the initial capital fund of $10 million. As proposed by the General Assembly of the state of Indiana, taxpayers were entitled to a credit against any state tax liability imposed on the taxpayer for a particular taxable year commencing after December 31, 1981, if the taxpayer purchased a "qualified investment" in a "qualified entity". The "qualified entity" was CID and the "qualified investment" was stock or a partnership interest in CID. The enabling legislation contained a detailed three-step formula to calculate the tax credit. The total amount of tax credits allowed under this program could not exceed an aggregate of $5 million. However, CID eventually raised nearly $10 million.

While CID was created with the objective of stimulating Indiana's economy through venture investments, the fund had the parallel goal of earning a satisfactory profit for the shareholders. To achieve this dual objective, CID is a long-term investor interested in capital appreciation rather than cash flow to provide a return to shareholders. Because of the long term nature and equity orientation of its investments, CID acts more like a management partner than simply a capital source. To this end, CID has assembled a team of professionals that assists young companies in decision-making on strategic issues. CID does not seek ownership control nor does it actively participate in the daily management activities in the companies in which it invests. In this respect, the fund acts like a private venture partner.

The usual investment horizon for the funds ranges from four to seven years at which time CID attempts to realize a long-term capital gain. The most common methods of exit are 1) agreed-upon sale of the business, 2) the sale of CID's investment to an agreed-upon third party, 3) repurchase of CID's position by the invested parties, or 4) public offering.

CID invests in a wide range of companies rather than specializing in just one area. CID has invested in a men's clothing manufacturer, a book publisher, a cellular telephone system operator, and a high tech firm that had developed a laser catheter to remove arterial blockages. Even though the portfolio is diversified, the underlying criteria are consistent with the original objectives.

### MTDC, MRCR, MCEC (Massachusetts)

The Massachusetts Technology Development Corporation (MTDC) was launched in 1978 to address the then existing "capital gap" for expansion of early-stage technology companies. As private venture capital began to flourish in the state, MTDC changed its focus from early stage companies to start-up companies where the capital gap continued to exist. The fund now specializes in providing capital to small Massachusetts-based technology companies that are trying to expand. In addition, MTDC has made efforts to diversify its investments among different industries and geographic areas in the state.

Through each phase of its operation, MTDC has pursued the following objectives: 1) to create primary employment in technology-oriented industries in the state; 2) to attract and leverage private investment in Massachusetts-based companies; 3) to foster the application of technological innovations where Massachusetts-based firms are, or can be leaders, and lastly; 4) to nurture entrepreneurship.

MTDC has developed several programs to encourage entrepreneurship. One program provides management assistance to small R&D companies that have received funding through the federal SBIR program, the Massachusetts Centers of Excellence Corporation (MCEC) or other R&D funding sources. In addition, MTDC sponsors entrepreneurial workshops which provide instruction and materials detailing the necessary steps to raise capital and become a product-oriented technological enterprise. In the past eight years, over 300 companies have received assistance from MTDC which has ultimately led to private investment.

Since 1978, MTDC has directly invested a total of $9.9 million in 35 companies. These direct investments have produced an additional $44.5 million in private investments at the initial phase of financing. Subsequent rounds of financing in the 35 portfolio companies brought the cumulative private dollars invested to $184 million. Over the past 12 months, MTDC invested in approximately six high tech firms.

As successful as this program appears on the surface, it has only been in the past few years that it has actually produced a profit. Since 1980 the fund has realized a gain of $4.6 million ($3.7 million in 1987) and cumulative losses on both debt and equity investments of $1.1 million. This results in a net gain of $3.5 million. These losses underscore an important point -- not all investments will be successful.

Another source of capital that is available to entrepreneurs in Massachusetts is through the Massachusetts Capital Resource Corporation (MCRC). This privately-funded venture capital fund was capitalized through the use of tax credits. Through the use of punitive state taxes, life insurance companies based in Massachusetts are required to invest in the fund. If a life insurance company does not meet quotas set by the legislature (in terms of dollars invested), a special tax is imposed. MCRC provides capital in five areas: 1) equity investments, 2) unsecured debt, 3) working capital, 4) equipment purchases, 5) subordinated debt. The fund is also involved in LBOs.

**IVCF (Iowa)**

Iowa is another state which initially offered a tax incentive to private investors to capitalize its Venture Capital Fund. However, this incentive is not currently being used; rather, the fund has formed a partnership with institutional investors such as Life Investors Insurance Company of America and Central Life Assurance Company. The Iowa Venture Capital Fund (IVCF) is a $10.6 million limited partnership which provides equity capital and management assistance to emerging and later stage manufacturers and service businesses. The fund was formed to focus on investments in Iowa. During its first 18 months of operation, investments were made solely within the state. Thereafter, the fund has invested up to one-third of its capital outside Iowa.

IVCF can invest up to 10 percent of its committed capital in any one investment. First round investment size can range from $100,000 to $500,000. The fund will provide financing for companies in all development stages except the seed stage. In analyzing an investment opportunity, IVCF looks for four characteristics. In order of importance they are: 1) a strong management team, 2) unique growth opportunities, 3) exceptional return on investment through high gross margins (50%), 4) cooperative management attitude. Obviously, management is of prime importance. The management team must be financially committed and must have had successful operating experience. Moreover, there must be a strong compatibility between the investors and the management team.

**BIDCO, MSF (Michigan)**

Through its state pension plan and several economic development departments, the state of Michigan has been active in the venture capital arena. Michigan has taken its involvement in the funding of young companies one step further than most other states using a Business and Industrial Development Corporation (BIDCO) program. Under legislation enacted in May 1986, the state established the Michigan Strategic Fund (MSF) and capitalized it with $24 million. MSF will make matching equity investments of up to $2 million per BIDCO on a 2-to-1 private dollars to state dollars ratio. The use of public funds to capitalize BIDCO is a departure from past efforts by other states and promises to expand this investment vehicle. BIDCOs in California, for example, did not receive matching funding from the state. This, according to some, restricted equity involvement in the recipient company. MSF, however, plans to make straight equity investments and to offer subordinated loans with equity kickers such as stock warrants, buyback options on warrants, and royalties on sales.

As of February 1988, only one BIDCO (Arcadia) had been licensed to operate by the state's Financial Institutions Bureau. Arcadia opened its doors in

November 1987 with $4 million from private investors and $2 million from the Strategic Fund. Arcadia plans to invest or finance a wide range of companies rather than concentrate on a particular industry. The BIDCO hopes to generate a 20 to 25 percent compound rate of return for equity investors and 2 to 5 percent above prime for debt investments.

The state hopes to accomplish two goals through the BIDCO program. First and foremost, MSF hopes to spur economic development through its matching contribution. The second objective is more in keeping with business objectives; that is, the fund plans to sell the state's shares in BIDCOs at an appropriate time, thereby realizing a profit. Supporters of the program believe these goals are achievable provided the fund avoids pitfalls that trapped BIDCOs in other states. For example, of the eight BIDCOs licensed in California, none are currently operating. These BIDCOs specialized in SBA lending because of a lack of risk capital. When SBA lending was recently cut, these firms could not compete. This forced either a merger with a bank or liquidation. Michigan plans to avoid this fate by acting as both debt and equity lender rather than simply a SBA debt lender. While this role split answers one question, it raises another. "Can a venture capital investor (equity) also be a lender (debt)?" The verdict is still out.

### MSCF (Minnesota)

The Minnesota Seed Capital Fund (MSCF) was established in 1980 with state support. The state acted as a catalyst in the effort by initiating the funds development, publicly supporting the sponsors of the fund and by making a small contribution to the fund. Initially, sponsors of the Minnesota fund hoped to raise $5 million. However, the response was so positive, especially from the business community, that the fund exceeded that amount by $12 million.

As the name implies, MSCF prefers to invest in companies that are completing the initial R&D phase and are ready to enter the marketplace. The fund will also consider companies that are still in a development stage and need funding to finish a prototype, or to test market a product. The fund is interested in technology-oriented companies that possess proprietary products or processes. The company must be located in the state although companies willing to relocate to Minnesota will be considered. (This requirement is scheduled to be phased out in order to reduce the fund's dependency on the Minnesota economy.) The last general requirement is that the company must show a potential for a significant rate of return over a five- to ten-year period. Although the fund reports that the initial first stage financing ranges from $50,000 to $250,000, because of add-on financing, the fund averages about $400,000 per investment. To date, the fund has invested in 18 high tech companies.

Since the MSCF is primarily involved with young, inexperienced companies, it is staffed by a team of professionals who can assist the new firm. Most of this staff has "hands-on" experience with high tech firms. The fund has invested the entire original funding and is now in the process of raising a second $20 million fund. According to one of the investment officers, most of the capital for the second fund has already been raised, and more than likely will exceed $25 million.

## Summary of Programs

As states grapple with fiscal problems, sluggish economies and sunset industries, it only seems reasonable that they become involved in the development of promising young companies. The method of involvement is as varied as the states themselves. In the past 10 years many states have adopted or developed a multitude of financial programs to aid young companies. These programs run the political gauntlet. Michigan's BIDCO program is certainly one of the most experimental. Another option has been to shift investment emphasis and involvement once the private venture industry assumed a more active role. Iowa and Indiana invested as a first step to get the ball rolling and then, once rolling, reduced the state's direct involvement. Massachusetts took a completely different approach by using a punitive tax program to stimulate private investment by insurance companies. Minnesota responded to its capital needs with a seed program that is similar to the Utah Ventures.

Despite these variations on a theme, successful programs share several common characteristics. Successful programs begin with "full commitment" by the state. A full commitment is one which is long lasting, well-funded, and coordinated with state resources. Consider for example, that MTDC just recently posted a net gain after eight years of operations in one of the nation's most active high tech centers. If it takes eight years under the most favorable of circumstances, how long will it take other state programs to show a profit? More importantly, Massachusetts continued its support during these lean times and created other types of venture programs such as the MCRC, the Massachusetts Development Finance Corporation, Massachusetts Business Development Corporation, Massachusetts Thrift Fund and Economic Stabilization Fund. Each of these agencies can provide either equity capital or debt capital or both to young companies.

Some states have tried to meet the challenges of raising capital by establishing a number of programs. For them, the answer has been to provide many small, exotic programs in an attempt to cover all the bases. Too often, this approach has been unsuccessful because the programs are simply underfunded and too fragmented to be effective. The issue here is not the number of programs, per se, but the commitment that each program receives. Each state must evaluate a particular program as it fits both the resources available and its compatibility with other ongoing programs. This cannot be expressed strongly enough: duplication must be avoided. Without extensive evaluation, the chances of any program succeeding are greatly reduced.

What does all of this portend for Utah? Perhaps the most important thing the state can do is to first identify those approaches that best meet the needs of Utah entrepreneurs. This means that each method should be analyzed to determine both the potential effectiveness, but also the implementation costs and their compatibility with Utah's resources. The program initiated in Iowa illustrates this point. While the Iowa Venture Fund is interested in investing in high tech companies, its portfolio reflects the manufacturing orientation of the state's economy. No venture fund in Utah can be exclusively high tech oriented simply because Utah is not exclusively a high tech economy.

## Conclusions

Returning to the question, "Is there enough capital?" the answer is no. There is not enough venture capital for high tech companies in Utah. The acknowledgement of a capital gap is hardly surprising; after all, many entrepreneurs and executives struggle everyday with financial crises revolving around the lack of equity and debt capital. For them, the capital gap is very real and very large. On the other hand, the capital gap problem may not be as large as is perceived locally--nor is the problem insurmountable.

The capital gap seems large because it affects a very specific segment of the industry -- namely, mid-stage financing. Companies with promising innovations can find seed financing in Utah. The venture industry and the state offer such programs. At the opposite end of the financing spectrum (once a company has arrived at the late second stage or third stage) it can find fourth stage financing. A capital gap exists for companies at the first and early second stages. However, as a young high tech center, Utah does not have many companies at this stage so the macro-problem is not severe.

The capital gap problem is not insurmountable simply because the nature of Utah's high tech industry is such that the state has time to prepare. According to a survey recently completed by the Bureau of Economic and Business Research, University of Utah, there are about 300 high tech firms located in Utah. To put this number in a different perspective, each year an established venture capital firm will receive over 500 business proposals from firms seeking capital. From these proposals the investor will fund about 5 percent, or 25 deals -- if he has the money and if the proposal represents a "good deal". Given the investor's required return on investment, even if every high tech company in Utah wanted an infusion of venture capital, only 15 or 20 companies could even qualify for an average first round of funding.

Based on this percentage and the national average investment, a $30 million capital infusion would more than meet the first round capital gap. However, if other considerations are used to qualify companies (like existing financial arrangements or managerial skill of the founder), at least one-third of the 15 or 20 firms would not be candidates for venture capital and many of the remaining companies would not warrant a $2 million infusion. There is another consideration which would further eliminate companies. Some firms do not want the restrictions imposed as the result of a relationship with a venture capitalist. These entrepreneurs would rather rely on internal funding and grow at a slower pace than accept a capital infusion by venture capital under the conditions of such an investment. So, after these eliminating considerations, an educated estimate of the capital gap is closer to $10 or $15 million. This represents early stage financing for companies with a commercially-proven product and market.

It should be remembered that a capital infusion of even $15 million would take several years to allocate by prudent venture capitalists. More than likely, it would take most Utah companies several years to gear up for an infusion of $2 million dollars. For his part, the venture capitalist would probably stage the investment similar to the method used by Utah Ventures. As the company reaches certain thresholds, the capital is released to further the company's development. This time-release approach effectively reduces today's capital gap. The thrust of this is that it would be very difficult to simply drop $20 million into Utah's high tech sector and expect it to be a productive investment as soon as it is placed.

While the good news is that the capital gap is not at crisis proportions, the bad news is that in several years many companies funded in the mid-1980s at seed levels will need later stage financing. There are only a few venture firms in the state that can provide or arrange for this type of financing, and even then only in a limited number of cases. This need will become threatening in the coming years; in fact, Utah's capital gap is just beginning to emerge. Those companies funded several years ago through the seed and early stage programs are going to need many more dollars in the next few years. In other words, while the capital gap problem is not a crisis, it has the potential to become one.

The issue of capital gap from the perspective of the entrepreneur is generally different from that of the professional investor. When a company is beyond seed or idea stage financing, most of its financial needs fall into a more conventional setting. Its concern is one of finding on-going financing. There still is a need for equity dollars, but for the company, the immediacy of operations is paramount. Those executives and founders interviewed stressed the importance and need to develop working relationships with the banking community. Many entrepreneurs felt that the lack of such relationships was the biggest hindrance to their development.

It is recognized that the loss of just one successful high tech firm is a loss Utah cannot afford. One successful high tech firm can provide employment for hundreds of Utahns. In addition, each success enhances Utah's reputation as a high tech center, and reduces the burden of importing risk capital.

# Utah Business Statistics

| UTAH DATA | Mar. 1987 | Mar. 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,489 | 19,312 | 4.5% | 19,096 | 18,365 | 4.0% |
| New Corporations (no.) | 515 | 547 | 6.2% | 473 | 451 | 4.7% |
| New Car, Truck and Motorhome Sales (no.) | 3,199 | 5,326 | 66.5% | 5,204 | 5,837 | -19.1% |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 62.00 | 68.70 | 10.8% | 65.15 | 56.48 | 15.3% |
| Lambs (cwt) | 75.10 | 64.30 | -14.4% | 72.78 | 68.37 | 6.5% |
| Milk Wholesale (cwt) | 12.00 | 11.50 | -4.2% | 11.82 | 11.97 | -1.3% |
| Alfalfa Hay, Baled (per ton) | 66.00 | 75.00 | 13.6% | 69.33 | 66.39 | 4.4% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 39,491 | 48,344 | 22.4% | 43,691 | 38,399 | 13.8% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) [1] | 112,917 | 105,671 | -6.4% | 123,121 | 128,032 | -3.8% |
| Residential | 54,970 | 53,495 | -2.7% | 51,643 | 59,364 | -13.0% |
| Nonresidential | 28,363 | 40,721 | 43.6% | 41,190 | 48,438 | -15.0% |
| Public Works and Utilities | 29,584 | 11,455 | -61.3% | 30,288 | 20,480 | 47.9% |
| Total Permit Construction (thous. of dol.) [2] | 128,183.7 | 75,864.9 | -40.8% | 82,214.5 | 109,419.0 | -24.9% |
| Residential | 53,165.7 | 38,080.0 | -28.4% | 38,798.7 | 57,260.1 | -32.2% |
| Nonresidential | 63,583.7 | 26,343.0 | -58.6% | 29,777.7 | 38,288.3 | -22.2% |
| Additions, Alterations and Repairs | 11,434.3 | 11,441.9 | 0.1% | 13,639.0 | 13,891.1 | -1.8% |
| New Dwelling Units (no.) | 842 | 506 | -39.9% | 558 | 1,023 | -45.5% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 753.9 | 760.2 | 0.8% | 757.8 | 753.8 | 0.5% |
| Total Employed Persons | 698.8 | 716.2 | 2.5% | 711.7 | 708.2 | 0.5% |
| Unemployed Persons | 55.1 | 44.0 | -20.1% | 46.1 | 45.4 | 1.5% |
| Percent Total Labor Force | 7.5 | 5.8 | -22.7% | 6.1 | 6.0 | 0.8% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 632.6 | 643.8 | 1.8% | 643.0 | 635.5 | 1.2% |
| Manufacturing | 89.9 | 95.2 | 5.9% | 93.9 | 91.2 | 3.0% |
| Mining | 7.6 | 8.4 | 10.5% | 8.2 | 7.7 | 6.1% |
| Contract Construction | 25.0 | 21.1 | -15.6% | 26.1 | 31.3 | -16.4% |
| Transportaion, Communication and Utilities | 37.4 | 38.1 | 1.9% | 38.0 | 37.4 | 1.7% |
| Wholesale Trade | 34.8 | 34.3 | -1.4% | 35.6 | 35.8 | -0.6% |
| Retail Trade | 115.4 | 115.8 | 0.3% | 118.5 | 117.5 | 0.9% |
| Finance, Insurance and Real Estate | 33.7 | 33.4 | -0.9% | 33.8 | 33.2 | 1.7% |
| Services [3] | 144.2 | 153.4 | 6.4% | 147.6 | 139.8 | 5.6% |
| Federal Government [4] | 40.5 | 39.6 | -2.2% | 39.6 | 40.5 | -2.2% |
| State Government [4] | 39.0 | 38.6 | -1.0% | 37.4 | 38.0 | -1.6% |
| Local Government [4] | 65.2 | 65.8 | 0.9% | 64.4 | 63.2 | 1.8% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 39.1 | 39.8 | 1.8% | 40.2 | 39.7 | 1.4% |
| Mining | 40.3 | 43.5 | 7.9% | 41.9 | 42.0 | -0.2% |
| Wholesale Trade | 37.3 | 38.5 | 3.2% | 38.5 | 37.4 | 3.1% |
| Retail Trade | 27.9 | 27.8 | -0.4% | 28.2 | 28.0 | 0.6% |
| Amount of Unemployment Compensation (thous. of dol.) | 12,319.2 | 9,606.7 | -22.0% | 7,027.1 | 8,770.0 | -19.9% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,461.1 | 2,107.4 | -14.4% | 2,381.7 | 2,392.6 | -0.5% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 60,439.3 | 70,014.8 | 15.8% | 144,183.2 | 124,757.6 | 15.6% |
| Sales and Use Tax | 2,996.6 | 7,481.1 | 149.7% | 49,150.4 | 46,016.4 | 6.8% |
| Motor Fuel Tax | 7,287.9 | 10,566.4 | 45.0% | 10,107.7 | 7,783.1 | 29.9% |
| Individual Income Tax | 20,990.1 | 32,681.3 | 55.7% | 51,021.1 | 40,807.1 | 25.0% |
| Corporation Franchise Tax | 5,030.5 | 1,493.7 | -70.3% | 6,955.5 | 4,196.2 | 65.8% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,132.3 | 1,232.9 | 8.9% | 1,166.0 | 1,104.3 | 5.6% |
| Crude Oil to Refineries (thous. of bbls.) | 3,589.5 | 3,599.0 | 0.3% | 3,786.3 | 3,911.8 | -3.2% |
| Crude Oil (thous. of bbls.) | 2,843.6 | 2,864.1 | 0.7% | 2,923.5 | 3,118.9 | -6.3% |
| Natural Gas (mil. of cu. ft.) | 19,480.4 | 22,661.5 | 16.3% | 22,379.7 | 19,759.3 | 13.3% |
| Coal (thous. short tons) | 911.0 | 1,675.0 | 83.9% | 1,451.8 | 900.0 | 61.3% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 983,352 | 964,406 | -1.0% | 848,112 | 839,670 | 1.0% |
| Highway Traffic Count Across State Lines | 30,008 | NA | NA | NA | 37,526 | NA |
| Transient Room Taxes (thous. of dol.) | (449.5) | 2,090.2 | -565.0% | 574.5 | 472.2 | 21.7% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 412.8 | 485.7 | 17.7% | 1,072.1 | 1,000.2 | 7.2% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 478,742 | 486,879 | 1.7% | 481,991 | 474,104 | 1.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 174,199 | 179,376 | 3.0% | 177,128 | 170,275 | 4.0% |
| Electric Customers (Residential) | 472,120 | 476,830 | 1.0% | 474,450 | 464,792 | 2.1% |
| Electric Customers (Commercial) | 46,308 | 46,598 | 0.6% | 46,367 | 45,548 | 1.8% |
| Natural Gas Customers (Residential & Commercial) | 450,458 | 461,877 | 2.5% | 449,686 | 438,431 | 2.6% |
| Natural Gas Customers (Industrial) | 555 | 543 | -2.2% | 551 | 565 | -2.4% |

# Utah Business Statistics

| UTAH DATA | Mar. 1987 | Mar. 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Davis County | | | | | | |
| Non-Ag. Employment (thous.) | 51.5r | 51.1fo | -0.8% | 52.6 | 52.9 | -0.7% |
| Unemployment Rate | 5.7r | 4.8 | -15.8% | 5.2 | 4.8 | 8.4% |
| Auth. Permit Construction (thous. of dol.) | 38,895.6 | 9,562.1 | -75.4% | 10,009.2 | 16,544.3 | -39.5% |
| New Dwelling Units (no.) | 113 | 78 | -31.0% | 84 | 182 | -53.6% |
| Postal Receipts (thous. of dol.) | 388.1 | 384.6 | -0.9% | 385.5 | NA | NA |
| Electric Customers (Residential) | 47,105 | 48,050 | 2.0% | 47,609 | 45,767 | 4.0% |
| Electric Customers (Commercial) | 3,259 | 3,384 | 3.8% | 3,320 | 3,261 | 1.8% |
| Natural Gas Customers (Residential) | 48,934 | 50,312 | 2.8% | 49,202 | 47,055 | 4.6% |
| Natural Gas Customers (Industrial) | 52 | 52 | 0.0% | 52 | 51 | 1.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 54,504 | 54,929 | 0.8% | 54,895 | 53,639 | 2.3% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,433 | 11,156 | 6.9% | 10,740 | 10,212 | 5.2% |
| Salt Lake County | | | | | | |
| Non-Ag. Employment (thous.) | 329.6r | 334.5fo | 1.5% | 335.1 | 331.0 | 1.2% |
| Unemployment Rate | 6.3r | 5.4 | -14.3% | 5.4 | 5.4 | 0.9% |
| Auth. Permit Construction (thous. of dol.) | 56,341.5 | 32,031.2 | -43.1% | 37,195.8 | 55,747.7 | -33.3% |
| New Dwelling Units (no.) | 366 | 195 | -46.7% | 205 | 473 | -56.8% |
| Postal Receipts (thous. of dol.) | 6,971.8 | 7,095.7 | 1.8% | 7,360.3 | 7,086.7 | 3.9% |
| Electric Customers (Residential) | 236,980 | 240,138 | 1.3% | 237,211 | 232,919 | 1.8% |
| Electric Customers (Commercial) | 19,901 | 20,406 | 2.5% | 20,069 | 19,484 | 3.0% |
| Natural Gas Customers (Residential) | 220,345 | 223,141 | 1.3% | 217,994 | 214,030 | 1.9% |
| Natural Gas Customers (Industrial) | 247 | 233 | -5.7% | 237 | 253 | -6.4% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 225,928 | 229,256 | 1.5% | 227,731 | 223,770 | 1.8% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 109,047 | 110,285 | 1.1% | 110,121 | 108,379 | 1.6% |
| Utah County | | | | | | |
| Non-Ag. Employment (thous.) | 73.1r | 74.9fo | 2.5% | 73.8 | 72.4 | 1.9% |
| Unemployment Rate | 8.5r | 5.3 | -37.6% | 6.2 | 6.9 | -9.2% |
| Auth. Permit Construction (thous. of dol.) | 11,057.4 | 12,914.9 | 16.8% | 12,646.8 | 9,760.9 | 29.6% |
| New Dwelling Units (no.) | 143 | 62 | -56.6% | 86 | 107 | -19.8% |
| Postal Receipts (thous. of dol.) | 913.6 | 1,026.8 | 12.4% | 952.1 | 919.4 | 3.6% |
| Electric Customers (Residential) | 50,076 | 51,815 | 3.5% | 52,436 | 50,009 | 4.9% |
| Electric Customers (Commercial) | 6,404 | 5,924 | -7.5% | 6,167 | 6,225 | -0.9% |
| Natural Gas Customers (Residential) | 60,635 | 62,017 | 2.3% | 60,615 | 59,824 | 1.3% |
| Natural Gas Customers (Industrial) | 67 | 69 | 3.0% | 69 | 71 | -2.8% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 62,370 | 64,690 | 3.7% | 62,945 | 62,221 | 1.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 18,492 | 19,718 | 6.6% | 19,123 | 16,580 | 15.3% |
| Weber County | | | | | | |
| Non-Ag. Employment (thous.) | 60.4r | 61.2fo | 1.3% | 60.8 | 60.2 | 1.0% |
| Unemployment Rate | 7.3r | 6.6 | -9.6% | 7.0 | 6.5 | 6.9% |
| Auth. Permit Construction (thous. of dol.) | 8,372.1 | 8,235.1 | -1.6% | 7,764.9 | 10,085.7 | -23.0% |
| New Dwelling Units (no.) | 78 | 58 | -25.6% | 63 | 85 | -26.0% |
| Postal Receipts (thous. of dol.) | 675.9 | 593.1 | -12.3% | 613.5 | 625.5 | -1.9% |
| Electric Customers (Residential) | 52,822 | 53,514 | 1.3% | 53,034 | 52,128 | 1.7% |
| Electric Customers (Commercial) | 4,835 | 4,931 | 2.0% | 4,875 | 4,763 | 2.4% |
| Natural Gas Customers (Residential) | 49,447 | 50,083 | 1.3% | 49,157 | 48,340 | 1.7% |
| Natural Gas Customers (Industrial) | 84 | 83 | -1.2% | 85 | 86 | -1.4% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,883 | 46,209 | 0.7% | 46,044 | 45,517 | 1.2% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,932 | 11,714 | 7.2% | 11,209 | 10,598 | 5.8% |

r Revised  fo Forecast  Na - Not available

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U S. Department of Commerce |
| New Corporations: | Utah Secretary of State |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research |
| Employment Data: | Utah Department of Employment Security |
| Savings Information: | Utah Savings and Loan Institutions |
| Tax Collections: | Utah State Tax Commission |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining |
| Coal Production: | U.S. Department of Energy |
| Air Passengers: | Salt Lake City International Airport, Statistics Division |
| Highway Traffic Count: | Utah Department of Transportation |
| Visits to State and National Parks and Monuments: | U. S. Forest Service, Utah State Parks and Recreation Department |
| Utilities Data: | Cooperating Utah utility companies |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah, and Weber Counties |

Footnotes:

[1] Obtained from F.W. Dodge Statistics
[2] Obtained from Utah Construction Report
[3] Includes services by nonprofit and religious institutions
[4] Includes public schools and college institutions

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| NATIONAL DATA | Mar. 1987 | Mar. 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,377.7 | 4,665.1 | 6.6% | 4,560.1 | 4,272.2 | 6.7% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,683.4 | 3,936.7 | 6.9% | 3,805.8 | 3,584.0 | 6.2% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 127.4 | 134.7 | 5.7% | 131.7 | 125.5 | 5.0% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 374.2 | 409.7 | 9.5% | 399.4 | 378.0 | 5.7% |
| Index of Leading Indicators (1967=100) | 187.6 | 191.8 | 2.2% | 191.0 | 182.0 | 4.9% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1982-84=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 112.1 | 116.5 | 3.9% | 114.7 | 110.2 | 4.1% |
| CPI-U (All Urban Consumers) Food & Beverages | 112.5 | 116.0 | 3.1% | 114.4 | 110.2 | 3.7% |
| CPI-U (All Urban Consumers) Housing | 112.6 | 117.0 | 3.7% | 115.3 | 111.6 | 3.3% |
| [illegible]-U (All Urban Consumers) Transportation | 103.3 | 106.5 | 3.1% | 106.4 | 101.7 | 4.6% |
| [illegible]-U (All Urban Consumers) Medical Care | 127.8 | 136.3 | 6.7% | 132.2 | 124.3 | 6.4% |
| CPI-U (All Urban Consumers) Energy | 85.8 | 86.5 | 0.8% | 89.1 | 85.4 | 4.3% |
| Producer Price Index (not seasonally adjusted) (1982=100) | | | | | | |
| Producer Price Index, All Finished Goods | 104.3 | 106.2 | 1.8% | 105.8 | 103.2 | 2.6% |
| GNP Price Deflator (1982=100) (qtly.) | 116.1 | 119.1 | 2.6% | 118.3 | 114.9 | 3.0% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 119.2 | 120.9 | 1.4% | 120.3 | 118.4 | 1.6% |
| Total Civilian Employment (mil.) | 111.3 | 114.1 | 2.5% | 113.2 | 110.2 | 2.7% |
| Unemployment Rate | 6.6 | 5.6 | -15.2% | 6.0 | 6.9 | -13.7% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 22,621.9r | 21,707.5 | -4.0% | 20,862.0 | 19,875.2 | 5.0% |
| Residential | 11,227.9r | 10,898.3 | -2.9% | 9,759.9 | 9,917.3 | -1.6% |
| Nonresidential | 7,228.9r | 6,957.0 | -3.8% | 7,245.0 | 6,557.4 | 10.5% |
| Non-Building | 4,165.1r | 3,852.2 | -7.5% | 3,855.4 | 3,400.5 | 13.4% |
| New Dwelling Units (no.) | 148,763r | 134,619 | -9.5% | 125,537 | 141,072 | -11.0% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 5.56 | 5.69 | 2.3% | 5.88 | 5.63 | 4.4% |
| Long Term (30-year Treasury bond yields) | 7.62 | 8.61 | 13.0% | 8.62 | 7.83 | 10.1% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 7.50 | 8.50 | 13.3% | 8.48 | 7.87 | 7.7% |
| Mortgage Rates (new homes) | 8.77 | 8.77 | 0.0% | 8.90 | 9.50 | -6.3% |

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

F.W. Dodge Report, McGraw-Hill: National Construction Data.

Survey of Current Business, U.S. Department of Commerce: New Home Mortgage Rates.

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Indexes.

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# UTAH'S GROSS STATE PRODUCT FOR THE YEARS 1963-1986

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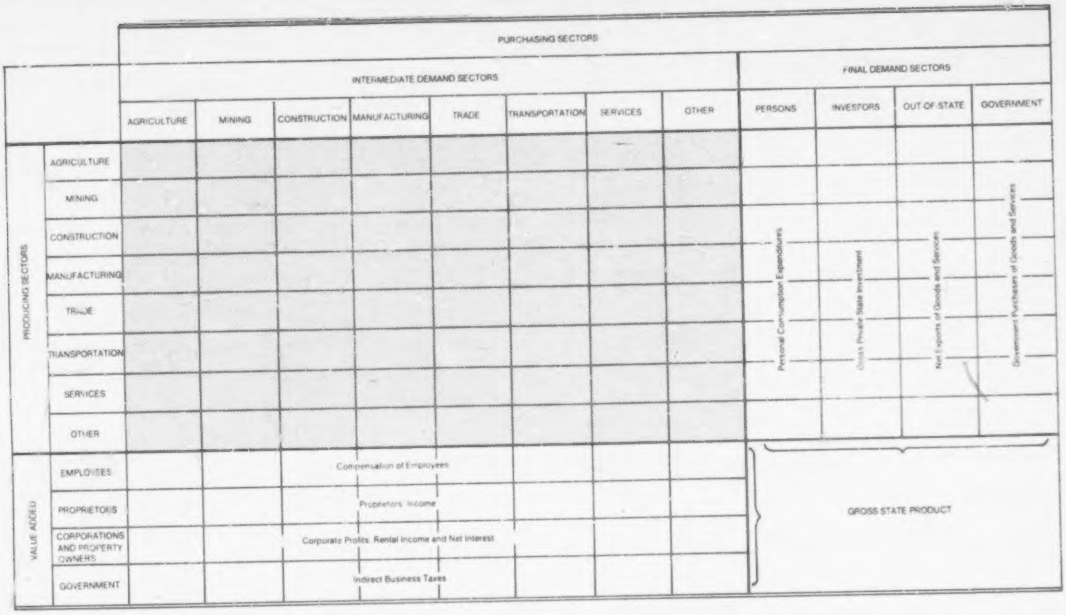
The University of Utah's Bureau of Economic and Business Research has been designated by the United States Department of Commerce, Bureau of Economic Analysis (BEA) as a member of the BEA User Group. In consequence the BEA periodically furnishes the Bureau of Economic and Business Research with unpublished data in the interest of providing for its public dissemination. Most recently, the Bureau of Economic and Business Research has received BEA estimates of gross state product by major value added component and also estimates of gross state product originating in each of 61 industrial sectors for the years 1963 through 1986. The release of these data by the Bureau of Economic Analysis marks the culmination of a major effort on the part of the BEA and provides us for the first time with a set of consistent estimates of gross state product for all 50 states and the District of Columbia. The purpose of this article is to provide an overview of the concept of gross state product and to present gross state product data for the State of Utah for selected years between 1963 and 1986.

## The Concept of Gross State Product

The gross state product (GSP) of a state may be defined as the gross market value of the final goods and services produced by the labor and capital located within its borders. Gross state product is *gross* in the sense that it includes the value of capital consumed in the process of production. But at the same time it should be noted that by including only the market value of *final* goods and services, GSP excludes the value of all goods and services furnished by one business firm to another business firm located in the same state. Gross state product may thus be thought of as the gross market value of the goods and services collectively produced by a state's business sector (including the government sector in its capacity as an employer of labor services). As such GSP is the state counterpart of the nation's gross domestic product (GDP). Gross domestic product, incidentally, differs from gross national product (GNP) only by the difference between foreign production attributable to

Figure 1
State Interindustry Transactions Table


PURCHASING SECTORS
INTERMEDIATE DEMAND SECTORS
FINAL DEMAND SECTORS
AGRICULTURE
MINING
CONSTRUCTION
MANUFACTURING
TRADE
TRANSPORTATION
SERVICES
OTHER
PERSONS
INVESTORS
OUT OF STATE
GOVERNMENT
PRODUCING SECTORS
AGRICULTURE
MINING
CONSTRUCTION
MANUFACTURING
TRADE
TRANSPORTATION
SERVICES
OTHER
Personal Consumption Expenditures
Gross Private State Investment
Net Exports of Goods and Services
Government Purchases of Goods and Services
VALUE ADDED
EMPLOYEES
PROPRIETORS
CORPORATIONS AND PROPERTY OWNERS
GOVERNMENT
Compensation of Employees
Proprietors' Income
Corporate Profits, Rental Income and Net Interest
Indirect Business Taxes
GROSS STATE PRODUCT

capital and labor services provided by U.S. citizens and domestic production attributable to capital and labor services provided by foreign nationals.

Conceptually there are two different possible approaches to estimating a state's GSP. Both of these approaches may be illustrated by means of an analytical construct referred to as an interindustry transactions table. A schematic representation of such a table for a state economy is shown in Figure 1. Essentially this table shows how the total output of each producing sector is distributed among purchasing sectors (reading across rows), or conversely, what the total input of each purchasing sector consists of in terms of producing sector source (reading down columns). It may be noted that the purchasing sectors are comprised of two principal classes: (1) intermediate demand, and (2) final demand. The intermediate demand sectors consist of those sectors that purchase inputs for the purpose of transforming them into a different product or service for subsequent sale to another purchasing sector. It follows that the intermediate demand purchasing sectors are the same as the producing sectors, though viewed from the standpoint of their consumption activity rather than their production activity.

The final demand purchasing sectors are those that purchase output from the producing sectors, not for the purpose of further production and resale, but rather for final consumption or use in the state or for export. The primary input or value added sectors at the bottom of the transactions table are adjoined for the purpose of showing the inputs of the basic factors of production and to include any residual charges, so that the total input of each sector is brought into accounting balance with the total output of the sector. Since aggregate intermediate input must be equal to aggregate intermediate demand, it follows that aggregate value added must be equal to aggregate final demand, which is by definition equal to gross state product. It follows that gross state product may be estimated either by looking at product flows from producing sectors to final demand sectors or by looking at the producing sectors' consumption of primary inputs, i.e., value added.

## BEA's Estimating Procedure

In constructing the national income and product accounts the Bureau of Economic Analysis uses both approaches in estimating the nation's gross domestic product, with the difference between the two results being referred to as *statistical discrepancy*. Because of difficulties in tracing product flows from a state's producing sectors to the final demand sectors, the Bureau of Economic Analysis relies exclusively on the primary input or value added approach in coming up with its gross state product estimates. For the farming, mining, construction and manufacturing industries the BEA first estimates total gross state product directly (using benchmark value added data from the quinquennial economic censuses) and then subtracts estimates of employee compensation, proprietor's income and indirect business taxes to come up with an estimate of the capital charge (corporate and property income) component of GSP as a residual. For the remaining industrial sectors the Bureau of Economic Analysis estimates each of the four major components of gross state product individually and then adds them together to come up with total gross state product originating in the sector.

## Gross State Product by Major Component

Table 1 presents total gross state product, broken down by its four major components: (1) compensation of employees, (2) income of proprietors, (3) capital charges and (4) indirect business taxes. Compensation of employees refers to the total cost of hiring labor, including wages and salaries, fringe benefits and payroll taxes. Proprietors' income includes the net profits of unincorporated businesses plus an allowance for capital consumption for such businesses, together with an inventory valuation adjustment for proprietors' inventories.

Capital charges include corporate profits plus an allowance for capital consumption of corporate plant, together with an inventory valuation adjustment for corporate inventories. Also included in capital charges are rental payments to owners of real property used by business and net interest paid by business for the use of financial resources. Indirect business taxes refer to taxes that are not levied directly on business profits, namely, those taxes that are considered to be ordinary expenses of doing business. These include principally sales and property taxes levied on business by state and local governments, and also Federal excise taxes.

## Gross State Product by Industrial Sector

Table 2 presents Utah's gross state product at approximately the Standard Industrial Classification 2-digit level of detail for selected years between 1963 and 1986. Table 3 presents the same data, though adjusted for relative price changes in the product of each industry. Table 4 presents data showing the relative importance of each of the 61 industrial sectors in contributing to Utah's total current dollar gross state product for selected years between 1963 and 1986. Finally, Table 5 shows the relative importance of each industrial sector in terms of its real contribution to Utah's total gross state product (after adjusting for the effects of price changes in each of the industrial sectors).

### Table 1
### Gross State Product by Component, State of Utah, Selected Years, 1963-1986
[millions of dollars; component percent of total gross state product shown in parentheses]

| | 1963 | 1967 | 1972 | 1977 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Gross State Product | 2,979<br>(100.0) | 3,479<br>(100.0) | 5,465<br>(100.0) | 10,122<br>(100.0) | 17,007<br>(100.0) | 17,892<br>(100.0) | 19,381<br>(100.0) | 21,739<br>(100.0) | 23,172<br>(100.0) | 24,008<br>(100.0) |
| Compensation | 1,660<br>(55.7) | 2,046<br>(58.8) | 3,328<br>(60.9) | 6,148<br>(60.7) | 10,239<br>(60.2) | 10,944<br>(61.2) | 11,587<br>(59.8) | 12,772<br>(58.8) | 13,564<br>(58.5) | 13,943<br>(58.1) |
| Proprietors' income | 308<br>(10.3) | 403<br>(11.6) | 629<br>(11.5) | 1,218<br>(12.0) | 1,323<br>(7.8) | 1,276<br>(7.1) | 1,327<br>(6.8) | 1,538<br>(7.1) | 1,605<br>(6.9) | 1,781<br>(7.4) |
| Capital charges | 787<br>(26.4) | 747<br>(21.5) | 1,071<br>(19.6) | 2,015<br>(19.9) | 4,003<br>(23.5) | 4,187<br>(23.4) | 4,802<br>(24.8) | 5,415<br>(24.9) | 5,775<br>(24.9) | 6,014<br>(25.0) |
| Indirect business taxes | 225<br>(7.6) | 283<br>(8.1) | 438<br>(8.0) | 741<br>(7.3) | 1,443<br>(8.5) | 1,485<br>(8.3) | 1,665<br>(8.6) | 1,946<br>(9.0) | 2,133<br>(9.2) | 2,179<br>(9.1) |

Source: U.S. Department of Commerce, Bureau of Economic Analysis, July 1988.

# Table 2
## Gross State Product by Industrial Sector, State of Utah, Selected Years, 1963-1986

[millions of current dollars]

| | 1963 | 1967 | 1972 | 1977 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Gross State Product | 2,979 | 3,479 | 5,465 | 10,122 | 17,007 | 17,892 | 19,381 | 21,739 | 23,172 | 24,008 |
| Private industries | 2,549 | 2,813 | 4,433 | 8,482 | 14,561 | 15,216 | 16,466 | 18,590 | 19,699 | 20,319 |
| Agriculture, forestry, and fisheries | 83 | 113 | 159 | 216 | 362 | 382 | 352 | 393 | 374 | 400 |
| Farms | 78 | 106 | 147 | 191 | 323 | 340 | 302 | 338 | 317 | 349 |
| Agricultural services, forestry, and fisheries | 4 | 7 | 12 | 25 | 39 | 42 | 51 | 56 | 56 | 51 |
| Mining | 259 | 137 | 197 | 517 | 1,298 | 1,043 | 914 | 862 | 762 | 625 |
| Metal mining | 141 | 52 | 104 | 138 | 311 | 170 | 227 | 160 | 102 | 112 |
| Coal mining | 23 | 17 | 24 | 152 | 285 | 345 | 254 | 224 | 238 | 241 |
| Oil and gas extraction | 86 | 49 | 56 | 193 | 652 | 482 | 385 | 427 | 367 | 219 |
| Nonmetallic minerals, except fuels | 9 | 19 | 13 | 33 | 51 | 46 | 47 | 50 | 55 | 53 |
| Construction | 158 | 162 | 349 | 774 | 922 | 945 | 1,033 | 1,267 | 1,296 | 1,220 |
| Manufacturing | 617 | 600 | 840 | 1,501 | 2,724 | 2,797 | 3,026 | 3,658 | 3,904 | 3,989 |
| Durable goods | 470 | 413 | 602 | 1,038 | 1,944 | 1,926 | 2,052 | 2,520 | 2,664 | 2,669 |
| Lumber and wood products | 8 | 9 | 23 | 62 | 66 | 58 | 73 | 85 | 84 | 81 |
| Furniture and fixtures | 3 | 5 | 10 | 16 | 33 | 36 | 48 | 58 | 66 | 65 |
| Stone, clay, and glass products | 29 | 27 | 55 | 97 | 121 | 117 | 133 | 174 | 187 | 190 |
| Primary metal industries | 197 | 165 | 194 | 218 | 403 | 294 | 234 | 276 | 253 | 194 |
| Fabricated metal products | 22 | 41 | 55 | 127 | 196 | 187 | 176 | 217 | 205 | 193 |
| Machinery, except electrical | 22 | 33 | 109 | 244 | 532 | 578 | 604 | 697 | 744 | 747 |
| Electric and electronic equipment | 9 | 32 | 28 | 66 | 191 | 205 | 216 | 276 | 266 | 274 |
| Motor vehicles and equipment | 1 | 6 | 12 | 31 | 38 | 43 | 56 | 80 | 77 | 76 |
| Transportation equipment, excl. motor vehicles | 173 | 86 | 94 | 112 | 247 | 293 | 388 | 503 | 603 | 655 |
| Instruments and related products | 1 | 5 | 9 | 44 | 76 | 76 | 87 | 103 | 120 | 134 |
| Miscellaneous manufacturing industries | 4 | 5 | 12 | 22 | 42 | 40 | 37 | 51 | 60 | 59 |
| Nondurable goods | 146 | 187 | 239 | 463 | 780 | 871 | 974 | 1,138 | 1,240 | 1,320 |
| Food and kindred products | 69 | 78 | 93 | 149 | 206 | 223 | 228 | 240 | 265 | 282 |
| Tobacco manufactures | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Textile mill products | 0 | 0 | 1 | 2 | 1 | 1 | 3 | 3 | 2 | 3 |
| Apparel and other textile products | 7 | 15 | 25 | 52 | 74 | 78 | 85 | 84 | 80 | 81 |
| Paper and allied products | 4 | 4 | 9 | 11 | 20 | 21 | 22 | 28 | 46 | 56 |
| Printing and publishing | 24 | 27 | 36 | 82 | 155 | 175 | 194 | 229 | 254 | 264 |
| Chemicals and allied products | 9 | 9 | 26 | 61 | 156 | 173 | 180 | 206 | 202 | 204 |
| Petroleum and coal products | 26 | 48 | 41 | 75 | 127 | 167 | 230 | 310 | 347 | 380 |
| Rubber and miscellaneous plastic products | 5 | 6 | 7 | 31 | 38 | 32 | 31 | 37 | 42 | 50 |
| Leather and leather products | 0 | 0 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |

Table 2 (continued)

| | 1963 | 1967 | 1972 | 1977 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Transportation, communication, and utilities | 295 | 370 | 566 | 1,038 | 2,008 | 2,262 | 2,598 | 2,845 | 2,965 | 3,035 |
| Transportation | 153 | 192 | 295 | 452 | 784 | 813 | 907 | 1,001 | 1,036 | 1,060 |
| Railroad transportation | 79 | 88 | 104 | 110 | 214 | 212 | 234 | 271 | 277 | 277 |
| Local and interurban passenger transit | 8 | 9 | 12 | 25 | 37 | 20 | 21 | 22 | 23 | 24 |
| Trucking and warehousing | 50 | 70 | 138 | 243 | 344 | 338 | 337 | 379 | 392 | 400 |
| Water transportation | 0 | 0 | 0 | 1 | 3 | 3 | 4 | 0 | 0 | 0 |
| Transportation by air | 10 | 16 | 28 | 46 | 76 | 115 | 197 | 215 | 210 | 228 |
| Pipelines, except natural gas | 4 | 3 | 7 | 11 | 88 | 99 | 86 | 79 | 94 | 89 |
| Transportation services | 2 | 6 | 6 | 16 | 22 | 26 | 28 | 34 | 39 | 42 |
| Communication | 66 | 91 | 131 | 255 | 426 | 471 | 538 | 566 | 619 | 602 |
| Electric, gas, and sanitary services | 77 | 87 | 139 | 331 | 797 | 978 | 1,152 | 1,278 | 1,310 | 1,373 |
| Wholesale trade | 202 | 248 | 394 | 720 | 1,203 | 1,221 | 1,264 | 1,422 | 1,529 | 1,576 |
| Retail trade | 283 | 356 | 586 | 1,096 | 1,559 | 1,680 | 1,855 | 2,095 | 2,283 | 2,402 |
| Finance, insurance, and real estate | 375 | 476 | 747 | 1,405 | 2,387 | 2,567 | 2,863 | 3,086 | 3,323 | 3,574 |
| Banking | 40 | 53 | 85 | 133 | 260 | 299 | 335 | 370 | 339 | 336 |
| Credit agencies other than banks | 7 | 8 | 7 | 18 | 31 | 20 | 71 | 58 | 81 | 90 |
| Holding companies and investment services | 6 | 12 | 12 | 15 | 64 | 64 | 89 | 82 | 128 | 149 |
| Insurance carriers | 19 | 26 | 43 | 93 | 123 | 106 | 133 | 128 | 140 | 197 |
| Insurance agents, brokers, and services | 12 | 17 | 26 | 52 | 72 | 80 | 84 | 93 | 103 | 121 |
| Real estate | 290 | 359 | 573 | 1,093 | 1,837 | 1,999 | 2,150 | 2,354 | 2,531 | 2,681 |
| Services | 277 | 351 | 595 | 1,215 | 2,099 | 2,318 | 2,562 | 2,962 | 3,263 | 3,500 |
| Hotels and other lodging places | 16 | 20 | 34 | 73 | 118 | 144 | 154 | 192 | 173 | 185 |
| Personal services | 28 | 35 | 41 | 70 | 96 | 108 | 116 | 131 | 154 | 161 |
| Business services | 24 | 34 | 64 | 162 | 325 | 357 | 418 | 522 | 624 | 686 |
| Auto repair, services, and garages | 19 | 24 | 45 | 94 | 157 | 164 | 179 | 205 | 223 | 229 |
| Miscellaneous repair services | 8 | 11 | 22 | 44 | 71 | 80 | 81 | 93 | 90 | 88 |
| Motion pictures | 6 | 7 | 13 | 27 | 23 | 27 | 28 | 44 | 47 | 56 |
| Amusement and recreation services | 12 | 15 | 30 | 46 | 67 | 71 | 77 | 93 | 111 | 112 |
| Health services | 70 | 96 | 160 | 338 | 615 | 702 | 742 | 800 | 885 | 983 |
| Legal services | 13 | 19 | 28 | 63 | 102 | 124 | 141 | 163 | 178 | 199 |
| Educational services | 29 | 24 | 57 | 81 | 118 | 126 | 160 | 180 | 188 | 198 |
| Social services and membership organizations | 25 | 33 | 49 | 88 | 173 | 198 | 237 | 267 | 283 | 291 |
| Miscellaneous professional services | 20 | 26 | 44 | 117 | 220 | 202 | 211 | 252 | 287 | 293 |
| Private households | 8 | 8 | 9 | 12 | 15 | 16 | 17 | 19 | 19 | 20 |
| Government | 430 | 667 | 1,032 | 1,640 | 2,446 | 2,676 | 2,915 | 3,148 | 3,473 | 3,689 |
| Federal civilian government | 203 | 328 | 445 | 616 | 866 | 915 | 992 | 1,086 | 1,208 | 1,244 |
| Federal military government | 29 | 40 | 74 | 111 | 189 | 207 | 231 | 247 | 269 | 284 |
| State and local government | 199 | 299 | 513 | 913 | 1,390 | 1,554 | 1,691 | 1,815 | 1,997 | 2,162 |

Source: United States Department of Commerce, Bureau of Economic Analysis, July 1988.

## Table 3
## Real Gross State Product by Industrial Sector, State of Utah, Selected Years, 1963-1986

[millions of 1982 dollars]

| | 1963 | 1967 | 1972 | 1977 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Gross State Product | 10,202 | 10,344 | 12,083 | 15,324 | 18,093 | 17,892 | 18,570 | 20,177 | 20,920 | 21,193 |
| Private industries | 8,461 | 8,104 | 9,878 | 12,913 | 15,438 | 15,216 | 15,816 | 17,383 | 18,009 | 18,224 |
| Agriculture, forestry, and fisheries | 246 | 295 | 301 | 263 | 346 | 382 | 356 | 348 | 387 | 435 |
| Farms | 229 | 276 | 278 | 235 | 307 | 340 | 312 | 298 | 333 | 387 |
| Agricultural services, forestry, and fisheries | 17 | 20 | 23 | 28 | 39 | 42 | 44 | 50 | 53 | 48 |
| Mining | 1,322 | 813 | 888 | 1,074 | 1,290 | 1,043 | 910 | 957 | 832 | 712 |
| Metal mining | 357 | 209 | 301 | 247 | 306 | 170 | 194 | 183 | 106 | 103 |
| Coal mining | 134 | 93 | 79 | 201 | 306 | 345 | 254 | 247 | 267 | 276 |
| Oil and gas extraction | 810 | 469 | 483 | 583 | 623 | 482 | 416 | 483 | 410 | 284 |
| Nonmetallic minerals, except fuels | 21 | 42 | 25 | 43 | 55 | 46 | 45 | 45 | 49 | 48 |
| Construction | 970 | 777 | 925 | 1,305 | 982 | 945 | 1,018 | 1,176 | 1,154 | 1,037 |
| Manufacturing | 1,821 | 1,540 | 1,760 | 2,111 | 2,871 | 2,797 | 3,026 | 3,674 | 4,017 | 4,166 |
| Durable goods | 1,439 | 1,097 | 1,274 | 1,453 | 2,031 | 1,926 | 2,110 | 2,677 | 2,973 | 3,090 |
| Lumber and wood products | 19 | 24 | 41 | 74 | 73 | 58 | 64 | 76 | 76 | 71 |
| Furniture and fixtures | 7 | 10 | 19 | 23 | 36 | 36 | 47 | 56 | 59 | 55 |
| Stone, clay, and glass products | 77 | 68 | 108 | 134 | 126 | 117 | 130 | 164 | 171 | 167 |
| Primary metal industries | 630 | 476 | 441 | 300 | 390 | 294 | 231 | 264 | 248 | 195 |
| Fabricated metal products | 65 | 108 | 121 | 181 | 207 | 187 | 181 | 220 | 202 | 186 |
| Machinery, except electrical | 56 | 76 | 211 | 322 | 547 | 578 | 696 | 937 | 1,158 | 1,311 |
| Electric and electronic equipment | 15 | 53 | 44 | 83 | 202 | 205 | 211 | 267 | 257 | 264 |
| Motor vehicles and equipment | 2 | 11 | 20 | 45 | 41 | 43 | 55 | 77 | 73 | 68 |
| Transportation equipment, excl. motor vehicles | 555 | 250 | 226 | 191 | 287 | 293 | 373 | 467 | 551 | 586 |
| Instruments and related products | 1 | 8 | 15 | 64 | 80 | 76 | 85 | 97 | 114 | 127 |
| Miscellaneous manufacturing industries | 11 | 12 | 28 | 36 | 43 | 40 | 35 | 54 | 63 | 61 |
| Nondurable goods | 382 | 443 | 487 | 658 | 841 | 871 | 917 | 996 | 1,044 | 1,076 |
| Food and kindred products | 141 | 144 | 159 | 179 | 207 | 223 | 218 | 219 | 239 | 248 |
| Tobacco manufactures | | | | | | | | | | |
| Textile mill products | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 2 | 2 |
| Apparel and other textile products | 15 | 28 | 40 | 67 | 81 | 78 | 83 | 82 | 77 | 76 |
| Paper and allied products | 10 | 8 | 17 | 16 | 19 | 21 | 23 | 27 | 43 | 50 |
| Printing and publishing | 74 | 74 | 76 | 122 | 168 | 175 | 183 | 199 | 208 | 205 |
| Chemicals and allied products | 16 | 17 | 47 | 82 | 156 | 173 | 180 | 199 | 186 | 188 |
| Petroleum and coal products | 115 | 159 | 134 | 149 | 164 | 167 | 195 | 230 | 246 | 258 |
| Rubber and miscellaneous plastic products | 10 | 12 | 12 | 39 | 42 | 32 | 31 | 37 | 42 | 48 |
| Leather and leather products | 1 | 1 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 1 |

Table 3 (continued)

| | 1963 | 1967 | 1972 | 1977 | 1980 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Transportation, communication, and utilities | 780 | 965 | 1,196 | 1,578 | 2,217 | 2,262 | 2,425 | 2,558 | 2,554 | 2,536 |
| Transportation | 465 | 581 | 681 | 754 | 845 | 813 | 851 | 926 | 924 | 959 |
| Railroad transportation | 241 | 288 | 246 | 190 | 241 | 212 | 222 | 245 | 253 | 252 |
| Local and interurban passenger transit | 37 | 30 | 31 | 43 | 45 | 20 | 19 | 18 | 18 | 19 |
| Trucking and warehousing | 140 | 189 | 309 | 402 | 363 | 338 | 328 | 360 | 348 | 356 |
| Water transportation | 0 | 0 | 0 | 2 | 3 | 3 | 4 | 0 | 0 | 0 |
| Transportation by air | 27 | 42 | 58 | 68 | 85 | 115 | 169 | 183 | 177 | 197 |
| Pipelines, except natural gas | 13 | 15 | 22 | 27 | 87 | 99 | 82 | 87 | 90 | 94 |
| Transportation services | 7 | 16 | 14 | 22 | 23 | 26 | 28 | 33 | 38 | 40 |
| Communication | 117 | 157 | 205 | 324 | 462 | 471 | 516 | 515 | 534 | 497 |
| Electric, gas, and sanitary services | 199 | 227 | 310 | 501 | 909 | 978 | 1,058 | 1,117 | 1,095 | 1,080 |
| Wholesale trade | 528 | 610 | 829 | 1,052 | 1,228 | 1,221 | 1,239 | 1,354 | 1,460 | 1,511 |
| Retail trade | 823 | 913 | 1,177 | 1,563 | 1,673 | 1,680 | 1,800 | 1,961 | 2,051 | 2,132 |
| Finance, insurance, and real estate | 1,026 | 1,171 | 1,510 | 2,113 | 2,540 | 2,567 | 2,625 | 2,730 | 2,801 | 2,862 |
| Banking | 123 | 143 | 175 | 210 | 281 | 299 | 298 | 320 | 305 | 307 |
| Credit agencies other than banks | 28 | 18 | 14 | 17 | 26 | 20 | 40 | 39 | 45 | 48 |
| Holding companies and investment services | 21 | 25 | 28 | 34 | 61 | 64 | 68 | 71 | 85 | 86 |
| Insurance carriers | 48 | 54 | 63 | 90 | 102 | 106 | 110 | 115 | 122 | 139 |
| Insurance agents, brokers, and services | 49 | 58 | 63 | 82 | 80 | 80 | 83 | 83 | 90 | 101 |
| Real estate | 757 | 874 | 1,167 | 1,679 | 1,990 | 1,999 | 2,027 | 2,102 | 2,154 | 2,181 |
| Services | 945 | 1,019 | 1,292 | 1,855 | 2,291 | 2,318 | 2,417 | 2,625 | 2,753 | 2,834 |
| Hotels and other lodging places | 59 | 65 | 82 | 121 | 129 | 144 | 143 | 162 | 136 | 133 |
| Personal services | 87 | 99 | 96 | 110 | 103 | 108 | 109 | 117 | 130 | 132 |
| Business services | 81 | 101 | 154 | 251 | 359 | 357 | 399 | 463 | 515 | 547 |
| Auto repair, services, and garages | 57 | 67 | 96 | 141 | 167 | 164 | 172 | 192 | 202 | 200 |
| Miscellaneous repair services | 28 | 29 | 43 | 60 | 74 | 80 | 73 | 74 | 77 | 71 |
| Motion pictures | 16 | 16 | 25 | 39 | 25 | 27 | 27 | 38 | 39 | 45 |
| Amusement and recreation services | 32 | 34 | 53 | 61 | 70 | 71 | 74 | 85 | 99 | 95 |
| Health services | 252 | 284 | 360 | 527 | 680 | 702 | 697 | 725 | 766 | 821 |
| Legal services | 61 | 72 | 73 | 107 | 120 | 124 | 127 | 128 | 135 | 141 |
| Educational services | 101 | 66 | 97 | 113 | 125 | 126 | 151 | 158 | 158 | 159 |
| Social services and membership organizations | 76 | 89 | 95 | 127 | 136 | 198 | 225 | 241 | 245 | 245 |
| Miscellaneous professional services | 65 | 73 | 98 | 182 | 237 | 202 | 201 | 221 | 232 | 224 |
| Private households | 30 | 25 | 20 | 17 | 15 | 16 | 17 | 19 | 19 | 19 |
| Government | 1,740 | 2,241 | 2,205 | 2,411 | 2,655 | 2,676 | 2,754 | 2,794 | 2,911 | 2,969 |
| Federal civilian government | 909 | 1,210 | 974 | 920 | 935 | 915 | 949 | 978 | 1,036 | 1,050 |
| Federal military government | 129 | 147 | 161 | 166 | 204 | 207 | 221 | 222 | 230 | 240 |
| State and local government | 703 | 883 | 1,070 | 1,324 | 1,516 | 1,554 | 1,584 | 1,594 | 1,645 | 1,679 |

Source: United States Department of Commerce, Bureau of Economic Analysis, July 1988.

## Table 4
## Industrial Sector Shares of Total Current Dollar Gross State Product, State of Utah, Selected Years, 1963-1986

[percent]

| | 1963 | 1967 | 1972 | 1977 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Gross State Product | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Private industries | 85.57 | 80.86 | 81.12 | 83.80 | 85.62 | 85.04 | 84.96 | 85.51 | 85.01 | 84.63 |
| Agriculture forestry, and fisheries | 2.79 | 3.25 | 2.91 | 2.13 | 2.13 | 2.14 | 1.82 | 1.81 | 1.61 | 1.67 |
| Farms | 2.62 | 3.05 | 2.69 | 1.89 | 1.90 | 1.90 | 1.56 | 1.55 | 1.37 | 1.45 |
| Agricultural services, forestry, and fisheries | 0.13 | 0.20 | 0.22 | 0.25 | 0.23 | 0.23 | 0.26 | 0.26 | 0.24 | 0.21 |
| Mining | 8.69 | 3.94 | 3.60 | 5.11 | 7.63 | 5.83 | 4.72 | 3.97 | 3.29 | 2.60 |
| Metal mining | 4.73 | 1.49 | 1.90 | 1.36 | 1.83 | 0.95 | 1.17 | 0.74 | 0.44 | 0.47 |
| Coal mining | 0.77 | 0.49 | 0.44 | 1.50 | 1.68 | 1.93 | 1.31 | 1.03 | 1.03 | 1.00 |
| Oil and gas extraction | 2.89 | 1.41 | 1.02 | 1.91 | 3.83 | 2.69 | 1.99 | 1.96 | 1.58 | 0.91 |
| Nonmetallic minerals, except fuels | 0.30 | 0.55 | 0.24 | 0.33 | 0.30 | 0.26 | 0.24 | 0.23 | 0.24 | 0.22 |
| Construction | 5.30 | 4.66 | 6.39 | 7.65 | 5.42 | 5.28 | 5.33 | 5.83 | 5.59 | 5.08 |
| Manufacturing | 20.71 | 17.25 | 15.37 | 14.83 | 16.02 | 15.63 | 15.61 | 16.83 | 16.85 | 16.62 |
| Durable goods | 15.78 | 11.87 | 11.02 | 10.25 | 11.43 | 10.76 | 10.59 | 11.59 | 11.50 | 11.12 |
| Lumber and wood products | 0.27 | 0.26 | 0.42 | 0.61 | 0.39 | 0.32 | 0.38 | 0.39 | 0.36 | 0.34 |
| Furniture and fixtures | 0.10 | 0.14 | 0.18 | 0.16 | 0.19 | 0.20 | 0.25 | 0.27 | 0.28 | 0.27 |
| Stone, clay, and glass products | 0.97 | 0.78 | 1.01 | 0.96 | 0.71 | 0.65 | 0.69 | 0.80 | 0.81 | 0.79 |
| Primary metal industries | 6.61 | 4.74 | 3.55 | 2.15 | 2.37 | 1.64 | 1.21 | 1.27 | 1.09 | 0.81 |
| Fabricated metal products | 0.74 | 1.18 | 1.01 | 1.25 | 1.15 | 1.05 | 0.91 | 1.00 | 0.88 | 0.80 |
| Machinery, except electrical | 0.74 | 0.95 | 1.99 | 2.41 | 3.13 | 3.23 | 3.12 | 3.21 | 3.21 | 3.11 |
| Electric and electronic equipment | 0.30 | 0.92 | 0.51 | 0.65 | 1.12 | 1.15 | 1.11 | 1.27 | 1.15 | 1.14 |
| Motor vehicles and equipment | 0.03 | 0.17 | 0.22 | 0.31 | 0.22 | 0.24 | 0.29 | 0.37 | 0.33 | 0.32 |
| Transportation equipment, excl. motor vehicles | 5.81 | 2.47 | 1.72 | 1.11 | 1.45 | 1.64 | 2.00 | 2.31 | 2.60 | 2.73 |
| Instruments and related products | 0.03 | 0.14 | 0.16 | 0.43 | 0.45 | 0.42 | 0.45 | 0.47 | 0.52 | 0.56 |
| Miscellaneous manufacturing industries | 0.13 | 0.14 | 0.22 | 0.22 | 0.25 | 0.22 | 0.19 | 0.23 | 0.26 | 0.25 |
| Nondurable goods | 4.90 | 5.38 | 4.37 | 4.57 | 4.59 | 4.87 | 5.03 | 5.23 | 5.35 | 5.50 |
| Food and kindred products | 2.32 | 2.24 | 1.70 | 1.47 | 1.21 | 1.25 | 1.18 | 1.10 | 1.14 | 1.17 |
| Tobacco manufactures | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Textile mill products | 0.00 | 0.00 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 |
| Apparel and other textile products | 0.23 | 0.43 | 0.46 | 0.51 | 0.44 | 0.44 | 0.44 | 0.39 | 0.35 | 0.34 |
| Paper and allied products | 0.13 | 0.11 | 0.16 | 0.11 | 0.12 | 0.12 | 0.11 | 0.13 | 0.20 | 0.23 |
| Printing and publishing | 0.81 | 0.78 | 0.66 | 0.81 | 0.91 | 0.98 | 1.00 | 1.05 | 1.10 | 1.10 |
| Chemicals and allied products | 0.30 | 0.26 | 0.48 | 0.60 | 0.92 | 0.97 | 0.93 | 0.95 | 0.87 | 0.85 |
| Petroleum and coal products | 0.87 | 1.32 | 0.75 | 0.74 | 0.75 | 0.93 | 1.19 | 1.43 | 1.50 | 1.58 |
| Rubber and miscellaneous plastic products | 0.17 | 0.17 | 0.13 | 0.31 | 0.22 | 0.18 | 0.16 | 0.17 | 0.18 | 0.21 |
| Leather and leather products | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |

Table 4 (continued)

| | 1963 | 1967 | 1972 | 1977 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Transportation, communication, and utilities | 9.90 | 10.64 | 10.36 | 10.25 | 11.81 | 12.64 | 13.40 | 13.09 | 12.80 | 12.64 |
| Transportation | 5.14 | 5.52 | 5.40 | 4.47 | 4.61 | 4.54 | 4.68 | 4.60 | 4.47 | 4.42 |
| Railroad transportation | 2.65 | 2.53 | 1.90 | 1.09 | 1.26 | 1.18 | 1.21 | 1.25 | 1.20 | 1.15 |
| Local and interurban passenger transit | 0.27 | 0.26 | 0.22 | 0.25 | 0.22 | 0.11 | 0.11 | 0.10 | 0.10 | 0.10 |
| Trucking and warehousing | 1.68 | 2.01 | 2.53 | 2.40 | 2.02 | 1.89 | 1.74 | 1.74 | 1.69 | 1.67 |
| Water transportation | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 |
| Transportation by air | 0.34 | 0.46 | 0.51 | 0.45 | 0.45 | 0.64 | 1.02 | 0.99 | 0.91 | 0.95 |
| Pipelines, except natural gas | 0.13 | 0.09 | 0.13 | 0.11 | 0.52 | 0.55 | 0.44 | 0.36 | 0.41 | 0.37 |
| Transportation services | 0.07 | 0.17 | 0.11 | 0.16 | 0.13 | 0.15 | 0.14 | 0.16 | 0.17 | 0.17 |
| Communication | 2.22 | 2.62 | 2.40 | 2.52 | 2.50 | 2.63 | 2.78 | 2.60 | 2.67 | 2.51 |
| Electric, gas, and sanitary services | 2.58 | 2.50 | 2.54 | 3.27 | 4.69 | 5.47 | 5.94 | 5.88 | 5.65 | 5.72 |
| Wholesale trade | 6.78 | 7.13 | 7.21 | 7.11 | 7.07 | 6.82 | 6.52 | 6.54 | 6.60 | 6.56 |
| Retail trade | 9.50 | 10.23 | 10.72 | 10.83 | 9.17 | 9.39 | 9.57 | 9.64 | 9.85 | 10.00 |
| Finance, insurance, and real estate | 12.59 | 13.68 | 13.67 | 13.88 | 14.04 | 14.35 | 14.77 | 14.20 | 14.34 | 14.89 |
| Banking | 1.34 | 1.52 | 1.56 | 1.31 | 1.53 | 1.67 | 1.73 | 1.70 | 1.46 | 1.40 |
| Credit agencies other than banks | 0.23 | 0.23 | 0.13 | 0.18 | 0.18 | 0.11 | 0.37 | 0.27 | 0.35 | 0.37 |
| Holding companies and investment services | 0.20 | 0.34 | 0.22 | 0.15 | 0.38 | 0.36 | 0.46 | 0.38 | 0.55 | 0.62 |
| Insurance carriers | 0.64 | 0.75 | 0.79 | 0.92 | 0.72 | 0.59 | 0.69 | 0.59 | 0.60 | 0.82 |
| Insurance agents, brokers, and services | 0.40 | 0.49 | 0.48 | 0.51 | 0.42 | 0.45 | 0.43 | 0.43 | 0.44 | 0.50 |
| Real estate | 9.73 | 10.32 | 10.48 | 10.80 | 10.80 | 11.17 | 11.09 | 10.83 | 10.92 | 11.17 |
| Services | 9.30 | 10.09 | 10.89 | 12.00 | 12.34 | 12.96 | 13.22 | 13.63 | 14.08 | 14.58 |
| Hotels and other lodging places | 0.54 | 0.57 | 0.62 | 0.72 | 0.69 | 0.80 | 0.79 | 0.88 | 0.75 | 0.77 |
| Personal services | 0.94 | 1.01 | 0.75 | 0.69 | 0.56 | 0.60 | 0.60 | 0.60 | 0.66 | 0.67 |
| Business services | 0.81 | 0.98 | 1.17 | 1.60 | 1.91 | 2.00 | 2.16 | 2.40 | 2.69 | 2.86 |
| Auto repair, services, and garages | 0.64 | 0.69 | 0.82 | 0.93 | 0.92 | 0.92 | 0.92 | 0.94 | 0.96 | 0.95 |
| Miscellaneous repair services | 0.27 | 0.32 | 0.40 | 0.43 | 0.42 | 0.45 | 0.42 | 0.43 | 0.39 | 0.37 |
| Motion pictures | 0.20 | 0.20 | 0.24 | 0.27 | 0.14 | 0.15 | 0.14 | 0.20 | 0.20 | 0.23 |
| Amusement and recreation services | 0.40 | 0.43 | 0.55 | 0.45 | 0.39 | 0.40 | 0.40 | 0.43 | 0.48 | 0.47 |
| Health services | 2.35 | 2.76 | 2.93 | 3.34 | 3.62 | 3.92 | 3.83 | 3.68 | 3.82 | 4.09 |
| Legal services | 0.44 | 0.55 | 0.51 | 0.62 | 0.60 | 0.69 | 0.73 | 0.75 | 0.77 | 0.83 |
| Educational services | 0.97 | 0.69 | 1.04 | 0.80 | 0.69 | 0.70 | 0.83 | 0.83 | 0.81 | 0.82 |
| Social services and membership organizations | 0.84 | 0.95 | 0.90 | 0.87 | 1.02 | 1.11 | 1.22 | 1.23 | 1.22 | 1.21 |
| Miscellaneous professional services | 0.67 | 0.75 | 0.81 | 1.16 | 1.29 | 1.13 | 1.09 | 1.16 | 1.24 | 1.22 |
| Private households | 0.27 | 0.23 | 0.16 | 0.12 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 |
| Government | 14.43 | 19.17 | 18.88 | 16.20 | 14.38 | 14.96 | 15.04 | 14.48 | 14.99 | 15.37 |
| Federal civilian government | 6.81 | 9.43 | 8.14 | 6.09 | 5.09 | 5.11 | 5.12 | 5.00 | 5.21 | 5.18 |
| Federal military government | 0.97 | 1.15 | 1.35 | 1.10 | 1.11 | 1.16 | 1.19 | 1.14 | 1.16 | 1.18 |
| State and local government | 6.68 | 8.59 | 9.39 | 9.02 | 8.17 | 8.69 | 8.73 | 8.35 | 8.62 | 9.01 |

Source: United States Department of Commerce, Bureau of Economic Analysis, July 1988.

## Table 5
## Industrial Sector Shares of Total Constant 1982 Dollar Gross State Product, State of Utah, Selected Years, 1963-1986

[percent]

| | 1963 | 1967 | 1972 | 1977 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Gross State Product | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Private industries | 82.93 | 78.34 | 81.75 | 84.27 | 85.33 | 85.04 | 85.17 | 86.15 | 86.09 | 85.99 |
| Agriculture, forestry, and fisheries | 2.41 | 2.85 | 2.49 | 1.72 | 1.91 | 2.14 | 1.92 | 1.72 | 1.85 | 2.05 |
| Farms | 2.24 | 2.67 | 2.30 | 1.53 | 1.70 | 1.90 | 1.68 | 1.48 | 1.59 | 1.83 |
| Agricultural services, forestry, and fisheries | 0.17 | 0.19 | 0.19 | 0.18 | 0.22 | 0.23 | 0.24 | 0.25 | 0.25 | 0.23 |
| Mining | 12.96 | 7.86 | 7.35 | 7.01 | 7.13 | 5.83 | 4.90 | 4.74 | 3.98 | 3.36 |
| Metal mining | 3.50 | 2.02 | 2.49 | 1.61 | 1.69 | 0.95 | 1.04 | 0.91 | 0.51 | 0.49 |
| Coal mining | 1.31 | 0.90 | 0.65 | 1.31 | 1.69 | 1.93 | 1.37 | 1.22 | 1.28 | 1.30 |
| Oil and gas extraction | 7.94 | 4.53 | 4.00 | 3.80 | 3.44 | 2.69 | 2.24 | 2.39 | 1.96 | 1.34 |
| Nonmetallic minerals, except fuels | 0.21 | 0.41 | 0.21 | 0.28 | 0.30 | 0.26 | 0.24 | 0.22 | 0.23 | 0.23 |
| Construction | 9.51 | 7.51 | 7.66 | 8.52 | 5.43 | 5.28 | 5.48 | 5.83 | 5.52 | 4.89 |
| Manufacturing | 17.85 | 14.89 | 14.57 | 13.78 | 15.87 | 15.63 | 16.30 | 18.21 | 19.20 | 19.66 |
| Durable goods | 14.11 | 10.61 | 10.54 | 9.48 | 11.23 | 10.76 | 11.36 | 13.27 | 14.21 | 14.58 |
| Lumber and wood products | 0.19 | 0.23 | 0.34 | 0.48 | 0.40 | 0.32 | 0.34 | 0.38 | 0.36 | 0.34 |
| Furniture and fixtures | 0.07 | 0.10 | 0.16 | 0.15 | 0.20 | 0.20 | 0.25 | 0.28 | 0.28 | 0.26 |
| Stone, clay, and glass products | 0.75 | 0.66 | 0.89 | 0.87 | 0.70 | 0.65 | 0.70 | 0.81 | 0.82 | 0.79 |
| Primary metal industries | 6.18 | 4.60 | 3.65 | 1.96 | 2.16 | 1.64 | 1.24 | 1.31 | 1.19 | 0.92 |
| Fabricated metal products | 0.64 | 1.04 | 1.00 | 1.18 | 1.14 | 1.05 | 0.97 | 1.09 | 0.97 | 0.88 |
| Machinery, except electrical | 0.55 | 0.73 | 1.75 | 2.10 | 3.02 | 3.23 | 3.75 | 4.64 | 5.54 | 6.19 |
| Electric and electronic equipment | 0.15 | 0.51 | 0.36 | 0.54 | 1.12 | 1.15 | 1.14 | 1.32 | 1.23 | 1.25 |
| Motor vehicles and equipment | 0.02 | 0.11 | 0.17 | 0.29 | 0.23 | 0.24 | 0.30 | 0.38 | 0.35 | 0.32 |
| Transportation equipment, excl. motor vehicles | 5.44 | 2.42 | 1.87 | 1.25 | 1.59 | 1.64 | 2.01 | 2.31 | 2.63 | 2.77 |
| Instruments and related products | 0.01 | 0.08 | 0.12 | 0.42 | 0.44 | 0.42 | 0.46 | 0.48 | 0.54 | 0.60 |
| Miscellaneous manufacturing industries | 0.11 | 0.12 | 0.23 | 0.23 | 0.24 | 0.22 | 0.19 | 0.27 | 0.30 | 0.29 |
| Nondurable goods | 3.74 | 4.28 | 4.03 | 4.29 | 4.65 | 4.87 | 4.94 | 4.94 | 4.99 | 5.08 |
| Food and kindred products | 1.38 | 1.39 | 1.32 | 1.17 | 1.14 | 1.25 | 1.17 | 1.09 | 1.14 | 1.17 |
| Tobacco manufactures | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Textile mill products | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Apparel and other textile products | 0.15 | 0.27 | 0.33 | 0.44 | 0.45 | 0.44 | 0.45 | 0.41 | 0.37 | 0.36 |
| Paper and allied products | 0.10 | 0.08 | 0.14 | 0.10 | 0.11 | 0.12 | 0.12 | 0.13 | 0.21 | 0.24 |
| Printing and publishing | 0.73 | 0.72 | 0.63 | 0.80 | 0.93 | 0.98 | 0.99 | 0.99 | 0.99 | 0.97 |
| Chemicals and allied products | 0.16 | 0.16 | 0.39 | 0.54 | 0.86 | 0.97 | 0.97 | 0.99 | 0.89 | 0.89 |
| Petroleum and coal products | 1.13 | 1.54 | 1.11 | 0.97 | 0.91 | 0.93 | 1.05 | 1.14 | 1.18 | 1.22 |
| Rubber and miscellaneous plastic products | 0.10 | 0.12 | 0.10 | 0.25 | 0.23 | 0.18 | 0.17 | 0.18 | 0.20 | 0.23 |
| Leather and leather products | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |

Table 5 (continued)

| | 1963 | 1967 | 1972 | 1977 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|---|---|---|---|
| Transportation, communication, and utilities | 7.65 | 9.33 | 9.90 | 10.30 | 12.25 | 12.64 | 13.06 | 12.68 | 12.21 | 11.97 |
| Transportation | 4.56 | 5.62 | 5.64 | 4.92 | 4.67 | 4.54 | 4.58 | 4.59 | 4.42 | 4.53 |
| Railroad transportation | 2.36 | 2.78 | 2.04 | 1.24 | 1.33 | 1.18 | 1.20 | 1.21 | 1.21 | 1.19 |
| Local and interurban passenger transit | 0.36 | 0.29 | 0.26 | 0.28 | 0.25 | 0.11 | 0.10 | 0.09 | 0.09 | 0.09 |
| Trucking and warehousing | 1.37 | 1.83 | 2.56 | 2.62 | 2.01 | 1.89 | 1.77 | 1.78 | 1.66 | 1.68 |
| Water transportation | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 |
| Transportation by air | 0.26 | 0.41 | 0.48 | 0.44 | 0.47 | 0.64 | 0.91 | 0.91 | 0.85 | 0.93 |
| Pipelines, except natural gas | 0.13 | 0.15 | 0.18 | 0.18 | 0.48 | 0.55 | 0.44 | 0.43 | 0.43 | 0.44 |
| Transportation services | 0.07 | 0.15 | 0.12 | 0.14 | 0.13 | 0.15 | 0.15 | 0.16 | 0.18 | 0.19 |
| Communication | 1.15 | 1.52 | 1.70 | 2.11 | 2.55 | 2.63 | 2.78 | 2.55 | 2.55 | 2.35 |
| Electric, gas, and sanitary services | 1.95 | 2.19 | 2.57 | 3.27 | 5.02 | 5.47 | 5.70 | 5.54 | 5.23 | 5.10 |
| Wholesale trade | 5.18 | 5.90 | 6.86 | 6.87 | 6.79 | 6.82 | 6.67 | 6.71 | 6.98 | 7.13 |
| Retail trade | 8.07 | 8.83 | 9.74 | 10.20 | 9.25 | 9.39 | 9.69 | 9.72 | 9.80 | 10.06 |
| Finance, insurance, and real estate | 10.06 | 11.32 | 12.50 | 13.79 | 14.04 | 14.35 | 14.14 | 13.53 | 13.39 | 13.50 |
| Banking | 1.21 | 1.38 | 1.45 | 1.37 | 1.55 | 1.67 | 1.60 | 1.59 | 1.46 | 1.45 |
| Credit agencies other than banks | 0.27 | 0.17 | 0.12 | 0.11 | 0.14 | 0.11 | 0.22 | 0.19 | 0.22 | 0.23 |
| Holding companies and investment services | 0.21 | 0.24 | 0.23 | 0.22 | 0.34 | 0.36 | 0.37 | 0.35 | 0.41 | 0.41 |
| Insurance carriers | 0.47 | 0.52 | 0.52 | 0.59 | 0.56 | 0.59 | 0.59 | 0.57 | 0.58 | 0.66 |
| Insurance agents, brokers, and services | 0.48 | 0.56 | 0.52 | 0.54 | 0.44 | 0.45 | 0.45 | 0.41 | 0.43 | 0.48 |
| Real estate | 7.42 | 8.45 | 9.66 | 10.96 | 11.00 | 11.17 | 10.92 | 10.42 | 10.30 | 10.29 |
| Services | 9.26 | 9.85 | 10.69 | 12.11 | 12.66 | 12.96 | 13.02 | 13.01 | 13.16 | 13.37 |
| Hotels and other lodging places | 0.58 | 0.63 | 0.68 | 0.79 | 0.71 | 0.80 | 0.77 | 0.80 | 0.65 | 0.63 |
| Personal services | 0.85 | 0.96 | 0.79 | 0.72 | 0.57 | 0.60 | 0.59 | 0.58 | 0.62 | 0.62 |
| Business services | 0.79 | 0.98 | 1.27 | 1.64 | 1.98 | 2.00 | 2.15 | 2.29 | 2.46 | 2.58 |
| Auto repair, services, and garages | 0.56 | 0.65 | 0.79 | 0.92 | 0.92 | 0.92 | 0.93 | 0.95 | 0.97 | 0.94 |
| Miscellaneous repair services | 0.27 | 0.28 | 0.36 | 0.39 | 0.41 | 0.45 | 0.39 | 0.37 | 0.37 | 0.34 |
| Motion pictures | 0.16 | 0.15 | 0.21 | 0.25 | 0.14 | 0.15 | 0.15 | 0.19 | 0.19 | 0.21 |
| Amusement and recreation services | 0.31 | 0.33 | 0.44 | 0.40 | 0.39 | 0.40 | 0.40 | 0.42 | 0.47 | 0.45 |
| Health services | 2.47 | 2.75 | 2.98 | 3.44 | 3.76 | 3.92 | 3.75 | 3.59 | 3.66 | 3.87 |
| Legal services | 0.60 | 0.70 | 0.60 | 0.70 | 0.66 | 0.69 | 0.68 | 0.63 | 0.65 | 0.67 |
| Educational services | 0.99 | 0.64 | 0.80 | 0.74 | 0.69 | 0.70 | 0.81 | 0.78 | 0.76 | 0.75 |
| Social services and membership organizations | 0.74 | 0.86 | 0.79 | 0.83 | 1.03 | 1.11 | 1.21 | 1.19 | 1.17 | 1.16 |
| Miscellaneous professional services | 0.64 | 0.71 | 0.81 | 1.19 | 1.31 | 1.13 | 1.08 | 1.10 | 1.11 | 1.06 |
| Private households | 0.29 | 0.24 | 0.17 | 0.11 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Government | 17.06 | 21.66 | 18.25 | 15.73 | 14.67 | 14.96 | 14.83 | 13.85 | 13.91 | 14.01 |
| Federal civilian government | 8.91 | 11.70 | 8.06 | 6.00 | 5.17 | 5.11 | 5.11 | 4.85 | 4.95 | 4.95 |
| Federal military government | 1.26 | 1.42 | 1.33 | 1.08 | 1.13 | 1.16 | 1.19 | 1.10 | 1.10 | 1.13 |
| State and local government | 6.89 | 8.54 | 8.86 | 8.64 | 8.38 | 8.69 | 8.53 | 7.90 | 7.86 | 7.92 |

Source: United States Department of Commerce, Bureau of Economic Analysis, July 1988.

# Utah Business Statistics

| UTAH DATA | April 1987 | April 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,815 | NA | NA | NA | 18,409 | NA |
| New Corporations (no.) | 470 | 477 | 1.5% | 473 | 448 | 5.7% |
| New Car, Truck and Motorhome Sales (no.) | 4,976 | 5,604 | 12.6% | 5,257 | 5,731 | -19.1% |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 64.90 | 70.70 | 8.9% | 65.63 | 57.55 | 14.0% |
| Lambs (cwt) | 71.20 | 61.90 | -13.1% | 72.01 | 68.97 | 4.4% |
| Milk Wholesale (cwt) | 11.80 | 11.20 | -5.1% | 11.77 | 11.98 | -1.8% |
| Alfalfa Hay, Baled (per ton) | 63.00 | 74.00 | 17.5% | 70.25 | 65.58 | 7.1% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 44,970 | 45,932 | 2.1% | 43,771 | 38,978 | 12.3% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) 1 | 178,690 | 140,091 | -21.6% | 119,904 | 128,801 | -6.9% |
| Residential | 68,674 | 49,606 | -27.8% | 50,054 | 59,810 | -16.3% |
| Nonresidential | 47,909 | 26,465 | -44.8% | 39,403 | 47,461 | -17.0% |
| Public Works and Utilities | 62,107 | 64,460 | 3.8% | 30,484 | 21,781 | 40.0% |
| Total Permit Construction (thous. of dol.) 2 | 106,228.2 | 86,406.0 | -18.7% | 80,562.7 | 107,431.0 | -25.0% |
| Residential | 63,041.7 | 36,641.1 | -41.9% | 36,598.7 | 56,999.2 | -35.8% |
| Nonresidential | 29,244.4 | 33,944.9 | 16.1% | 30,169.4 | 37,060.1 | -18.6% |
| Additions, Alterations and Repairs | 13,942.1 | 15,820.0 | 13.5% | 13,795.5 | 13,392.2 | 3.0% |
| New Dwelling Units (no.) | 964 | 523 | -45.7% | 521 | 993 | -47.5% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 753.1 | 755.6 | 0.3% | 758.3 | 755.0 | 0.4% |
| Total Employed Persons | 703.0 | 716.1 | 1.9% | 713.1 | 708.5 | 0.7% |
| Unemployed Persons | 50.1 | 39.5 | -21.2% | 45.2 | 46.3 | -2.3% |
| Percent Total Labor Force | 6.6 | 5.2 | -21.2% | 6.0 | 6.1 | -2.8% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 636.1 | 646.7 | 1.7% | 643.7 | 635.6 | 1.3% |
| Manufacturing | 90.3 | 95.3 | 5.5% | 94.2 | 91.0 | 3.5% |
| Mining | 7.8 | 8.4 | 7.7% | 8.2 | 7.6 | 7.3% |
| Contract Construction | 26.1 | 22.4 | -14.2% | 25.7 | 30.8 | -16.3% |
| Transportaion, Communication and Utilities | 37.5 | 38.4 | 2.4% | 38.1 | 37.4 | 1.8% |
| Wholesale Trade | 34.6 | 34.3 | -0.9% | 35.4 | 35.7 | -0.8% |
| Retail Trade | 115.7 | 116.1 | 0.3% | 118.4 | 117.6 | 0.7% |
| Finance, Insurance and Real Estate | 33.6 | 33.5 | -0.3% | 33.7 | 33.3 | 1.3% |
| Services 3 | 145.9 | 154.3 | 5.8% | 148.8 | 140.5 | 5.9% |
| Federal Government | 40.3 | 39.7 | -1.5% | 39.6 | 40.4 | -2.1% |
| State Government 4 | 38.7 | 38.1 | -1.6% | 37.4 | 38.0 | -1.5% |
| Local Government 4 | 65.6 | 66.2 | 0.9% | 64.3 | 63.3 | 1.6% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 38.9 | 40.3 | 3.6% | 40.3 | 39.6 | 1.7% |
| Mining | 39.9 | 44.4 | 11.3% | 41.9 | 41.8 | 0.4% |
| Wholesale Trade | 36.9 | 35.5 | -3.8% | 38.4 | 37.3 | 3.0% |
| Retail Trade | 27.8 | 27.6 | -0.7% | 28.3 | 28.1 | 0.6% |
| Amount of Unemployment Compensation (thous. of dol.) | 9,540.[illegible] | 6,272.6 | -34.3% | 6,754.0 | 8,799.7 | -23.2% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,503.7 | 2,461.6 | -1.7% | 2,378.2 | 2,404.3 | -1.1% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 140,943.2 | 148,704.9 | 5.5% | 144,830.0 | 129,490.6 | 11.8% |
| Sales and Use Tax | 25,641.6 | 11,832.5 | -53.9% | 47,999.6 | 47,226.9 | 1.6% |
| Motor Fuel Tax | 6,108.1 | 8,421.4 | 37.9% | 10,300.4 | 7,991.7 | 28.9% |
| Individual Income Tax | 63,477.3 | 94,881.7 | 49.5% | 53,638.1 | 43,598.5 | 23.0% |
| Corporation Franchise Tax | 28,968.4 | 17,974.2 | -38.0% | 6,039.3 | 4,438.4 | 36.1% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of kwh) | 1,093.5 | 1,094.5 | 0.1% | 1,166.1 | 1,110.0 | 5.0% |
| Crude Oil to Refineries (thous. of bbls.) | 3,503.8 | 4,212.5 | 20.2% | 3,845.4 | 3,932.3 | -2.2% |
| Crude Oil (thous. of bbls.) | 2,912.0 | 2,829.1 | -2.8% | 2,916.6 | 3,079.0 | -5.3% |
| Natural Gas (mil. of cu. ft.) | 19,257.9 | 22,307.8 | 15.8% | 22,633.8 | 19,756.8 | 14.6% |
| Coal (thous. short tons) | 1,191.0 | 1,485.0 | 24.7% | 1,476.3 | 908.3 | 62.5% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 763,281 | 773,179 | 1.3% | 848,937 | 835,613 | 1.6% |
| Highway Traffic Count Across State Lines | 34,130 | NA | NA | NA | 37,681.1 | NA |
| Transient Room Taxes (thous. of dol.) | 240.8 | (1,397.8) | -680.5% | 438.0 | 483.6 | -9.4% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 895.9 | 941.6 | 5.1% | 1,075.9 | 1,013.9 | 6.1% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 478,412 | 487,516 | 1.9% | 482,750 | 474,725 | 1.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 174,993 | 179,652 | 2.7% | 177,516 | 170,923 | 3.9% |
| Electric Customers (Residential) | 471,444 | 475,965 | 1.0% | 474,827 | 465,617 | 2.0% |
| Electric Customers (Commercial) | 46,375 | 46,561 | 0.4% | 46,383 | 45,671 | 1.6% |
| Natural Gas Customers (Residential & Commercial) | 450,100 | 462,338 | 2.7% | 450,706 | 439,562 | 2.5% |
| Natural Gas Customers (Industrial) | 558 | 547 | -2.0% | 550 | 564 | -2.5% |

# Utah Business Statistics

| UTAH DATA | April 1987 | April 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| **Davis County** | | | | | | |
| Non-Ag. Employment (thous.) | 51.7r | 51.3fo | -0.8% | 52.2 | 52.8 | -1.1% |
| Unemployment Rate | 5.5r | 4.3 | -21.8% | 5.1 | 4.9 | 3.9% |
| Auth. Permit Construction (thous. of dol.) | 17,669.0 | 17,223.0 | -2.5% | 9,972.0 | 17,220.4 | -42.1% |
| New Dwelling Units (no.) | 151 | 87 | -42.4% | 79 | 187 | -57.8% |
| Postal Receipts (thous. of dol.) | 396.3 | NA | NA | NA | NA | NA |
| Electric Customers (Residential) | 47,181 | 47,935 | 1.6% | 47,672 | 45,978 | 3.7% |
| Electric Customers (Commercial) | 3,234 | 3,403 | 5.2% | 3,334 | 3,256 | 2.4% |
| Natural Gas Customers (Residential) | 49,061 | 50,319 | 2.6% | 49,307 | 47,299 | 4.2% |
| Natural Gas Customers (Industrial) | 52 | 52 | 0.0% | 52 | 51 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 54,659 | 55,130 | 0.9% | 54,935 | 53,814 | 2.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,447 | 11,218 | 7.4% | 10,804 | 10,247 | 5.4% |
| **Salt Lake County** | | | | | | |
| Non-Ag. Employment (thous.) | 331.2r | 336.4fo | 1.6% | 335.0 | 331.4 | 1.1% |
| Unemployment Rate | 5.7r | 4.9 | -14.0% | 5.3 | 5.4 | -0.8% |
| Auth. Permit Construction (thous. of dol.) | 47,422.1 | 43,466.4 | -8.3% | 36,866.2 | 52,480.9 | -29.8% |
| New Dwelling Units (no.) | 376 | 193 | -48.7% | 189 | 427 | -55.7% |
| Postal Receipts (thous. of dol.) | 7,194.6 | 8,172.1 | 13.6% | 7,441.8 | 7,094.0 | 4.9% |
| Electric Customers (Residential) | 235,929 | 239,319 | 1.4% | 237,494 | 233,339 | 1.8% |
| Electric Customers (Commercial) | 19,908 | 20,376 | 2.4% | 20,108 | 19,541 | 2.9% |
| Natural Gas Customers (Residential) | 219,363 | 222,700 | 1.5% | 218,272 | 214,568 | 1.7% |
| Natural Gas Customers (Industrial) | 245 | 237 | -3.3% | 236 | 252 | -6.3% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 226,385 | 229,694 | 1.5% | 228,007 | 224,179 | 1.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 109,564 | 110,338 | 0.7% | 110,185 | 108,580 | 1.5% |
| **Utah County** | | | | | | |
| Non-Ag. Employment (thous.) | 73.5r | 75.3fo | 2.4% | 74.2 | 72.4 | 2.4% |
| Unemployment Rate | 7.4r | 4.4 | -40.5% | 5.9 | 7.0 | -15.2% |
| Auth. Permit Construction (thous. of dol.) | 19,607.0 | 7,060.0 | -64.0% | 11,601.2 | 10,763.0 | 7.8% |
| New Dwelling Units (no.) | 193 | 58 | -69.9% | 75 | 117 | -36.0% |
| Postal Receipts (thous. of dol.) | 968.9 | 1,191.5 | 23.0% | 970.7 | 918.5 | 5.7% |
| Electric Customers (Residential) | 50,756 | 52,026 | 2.5% | 52,542 | 50,096 | 4.9% |
| Electric Customers (Commercial) | 6,455 | 5,924 | -8.2% | 6,123 | 6,260 | -2.2% |
| Natural Gas Customers (Residential) | 61,064 | 62,749 | 2.8% | 60,756 | 59,894 | 1.4% |
| Natural Gas Customers (Industrial) | 68 | 68 | 0.0% | 69 | 70 | -2.5% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 61,462 | 64,695 | 5.3% | 63,214 | 62,143 | 1.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 18,643 | 19,794 | 6.2% | 19,219 | 16,828 | 14.2% |
| **Weber County** | | | | | | |
| Non-Ag. Employment (thous.) | 60.4r | 61.9fo | 2.5% | 60.8 | 60.2 | 1.0% |
| Unemployment Rate | 7.1r | 5.7 | -19.7% | 6.8 | 6.6 | 3.3% |
| Auth. Permit Construction (thous. of dol.) | 7,362.7 | 6,119.6 | -16.9% | 7,661.3 | 9,808.6 | -21.9% |
| New Dwelling Units (no.) | 87 | 65 | -25.3% | 61 | 86 | -29.3% |
| Postal Receipts (thous. of dol.) | 596.2 | 722.7 | 21.2% | 624.1 | 620.8 | 0.5% |
| Electric Customers (Residential) | 52,759 | 53,505 | 1.4% | 53,096 | 52,218 | 1.7% |
| Electric Customers (Commercial) | 4,836 | 4,929 | 1.9% | 4,883 | 4,768 | 2.4% |
| Natural Gas Customers (Residential) | 49,315 | 50,150 | 1.7% | 49,227 | 48,449 | 1.6% |
| Natural Gas Customers (Industrial) | 84 | 83 | -1.2% | 85 | 86 | -1.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 45,989 | 46,383 | 0.9% | 46,077 | 45,577 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,943 | 11,785 | 7.7% | 11,279 | 10,631 | 6.1% |

r Revised    fo Forecast    Na Not Available

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce. |
| New Corporations: | Utah Secretary of State. |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit. |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service. |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research. |
| Employment Data: | Utah Department of Employment Security. |
| Savings Information: | Utah Savings and Loan Institutions. |
| Tax Collections: | Utah State Tax Commission. |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries. |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining. |
| Coal Production: | U.S. Department of Energy. |
| Air Passengers: | Salt Lake City International Airport, Statistics Division. |
| Highway Traffic Count: | Utah Department of Transportation. |
| Visits to State and National Parks and Monuments: | U.S. Forest Service, Utah State Parks and Recreation Department. |
| Utilities Data: | Cooperating Utah utility companies. |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah and Weber Counties. |

Footnotes:

1 Obtained from F.W. Dodge Statistics.
2 Obtained from Utah Construction Report.
3 Includes services by nonprofit and religious organizations.
4 Includes public schools and college institutions.

# Utah Business Statistics

| UTAH DATA | May 1987 | May 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.) | 18,815 | NA | NA | NA | 18,453 | NA |
| New Corporations (no.) | 478 | 509 | 6.5% | 476 | 448 | 6.3% |
| New Car, Truck and Motorhome Sales (no.) | 5,863 | 5,975 | 1.9% | 5,266 | 5,595 | -19.1% |
| Agriculture | | | | | | |
| Average Prices Recorded by Farmers (dol.) | | | | | | |
| Beef Steers and Heifers (cwt) (thous.) | 66.80 | 70.70 | 5.8% | 65.96 | 58.74 | 12.3% |
| Lambs (cwt) | 75.70 | 67.00 | -11.5% | 71.28 | 69.48 | 2.6% |
| Milk Wholesale (cwt) | 11.40 | 10.80 | -5.3% | 11.72 | 11.99 | -2.3% |
| Alfalfa Hay, Baled (per ton) | 59.00 | 74.00 | 25.4% | 71.50 | 64.42 | 11.0% |
| Cattle Slaughtered (live weight) (thous. of lbs.) | 35,537 | 45,108 | 26.9% | 44,568 | 39,087 | 14.0% |
| Construction | | | | | | |
| Total Construction (thous. of dol.) 1 | 106,975 | 148,943 | 39.2% | 123,402 | 126,473 | -2.4% |
| Residential | 61,782 | 58,592 | -5.2% | 49,788 | 57,829 | -13.9% |
| Nonresidential | 40,486 | 53,645 | 32.5% | 40,500 | 47,404 | -14.6% |
| Public Works and Utilities | 4,707 | 36,697 | 679.6% | 33,150 | 21,239 | 56.1% |
| Total Permit Construction (thous. of dol.) 2 | 106,567.1 | 81,386.8 | -23.6% | 78,464.3 | 105,447.3 | -25.6% |
| Residential | 54,149.7 | 42,774.9 | -21.0% | 35,650.8 | 54,775.8 | -34.9% |
| Nonresidential | 39,663.2 | 24,267.8 | -38.8% | 28,886.5 | 37,225.3 | -22.4% |
| Additions, Alterations and Repairs | 12,754.2 | 14,344.1 | 12.5% | 13,928.0 | 13,466.8 | 3.4% |
| New Dwelling Units (no.) | 851 | 589 | -30.8% | 499 | 941 | -47.0% |
| Employment | | | | | | |
| Civilian Labor Force (thous.) | 763.3 | 749.1 | -1.9% | 757.1 | 756.9 | 0.0% |
| Total Employed Persons | 713.2 | 712.7 | -0.1% | 713.0 | 709.4 | 0.5% |
| Unemployed Persons | 50.1 | 36.4 | -27.3% | 44.1 | 47.3 | -6.8% |
| Percent Total Labor Force | 6.6 | 4.9 | -25.8% | 5.8 | 6.3 | -7.0% |
| Employees on Nonagricultural Payrolls (thous. of jobs) | 639.9 | 649.8 | 1.5% | 644.5 | 635.9 | 1.4% |
| Manufacturing | 91.3 | 95.9 | 5.0% | 94.5 | 90.9 | 4.0% |
| Mining | 8.1 | 8.1 | 0.0% | 8.2 | 7.6 | 7.7% |
| Contract Construction | 27.5 | 23.9 | -13.1% | 25.4 | 30.2 | -15.7% |
| Transportaion, Communication and Utilities | 37.5 | 38.5 | 2.7% | 38.2 | 37.4 | 1.9% |
| Wholesale Trade | 34.8 | 34.5 | -0.9% | 35.4 | 35.6 | -0.6% |
| Retail Trade | 116.7 | 117.1 | 0.3% | 118.4 | 117.6 | 0.6% |
| Finance, Insurance and Real Estate | 33.6 | 33.7 | 0.9% | 33.8 | 33.3 | 1.3% |
| Services 3 | 144.7 | 152.5 | 5.4% | 149.4 | 141.3 | 5.7% |
| Federal Government | 40.4 | 39.9 | -1.2% | 39.5 | 40.4 | -2.2% |
| State Government 4 | 39.3 | 38.7 | -1.5% | 37.4 | 38.0 | -1.6% |
| Local Government 4 | 66.1 | 67.0 | 1.4% | 64.4 | 63.4 | 1.5% |
| Average Weekly Hours | | | | | | |
| Manufacturing | 39.5 | 40.5 | 2.5% | 40.4 | 39.5 | 2.1% |
| Mining | 39.6 | 42.9 | 8.3% | 42.2 | 41.2 | 2.5% |
| Wholesale Trade | 37.4 | 37.1 | -0.8% | 38.4 | 37.3 | 2.9% |
| Retail Trade | 28.1 | 28.0 | -0.4% | 28.2 | 28.1 | 0.5% |
| Amount of Unemployment Compensation (thous. of dol.) | 6,973.2 | 5,547.9 | -20.4% | 6,635.3 | 8,764.0 | -24.3% |
| Finance | | | | | | |
| Savings, Savings and Loan Association (mil. of dol.) | 2,502.4 | 2,456.4 | -1.8% | 2,374.4 | 2,416.1 | -1.7% |
| Tax Collections by the State of Utah (thous. of dol.) | | | | | | |
| Total Tax Collections | 228,408.5 | 253,928.1 | 11.2% | 146,956.6 | 126,674.8 | 16.0% |
| Sales and Use Tax | 98,703.0 | 130,039.5 | 31.7% | 50,611.0 | 46,088.9 | 9.8% |
| Motor Fuel Tax | 10,832.3 | 10,557.7 | -2.5% | 10,277.6 | 7,906.8 | 30.0% |
| Individual Income Tax | 70,466.9 | 52,130.0 | -26.0% | 52,110.0 | 44,098.4 | 18.2% |
| Corporation Franchise Tax | 7,180.8 | 6,033.0 | -16.0% | 5,943.6 | 4,159.5 | 42.9% |
| Production | | | | | | |
| Net Electric Power Utilized (mil. of [illegible]) | 1,076.9 | 1,156.6 | 7.4% | 1,172.7 | 1,110.4 | 5.6% |
| Crude Oil to Refineries (thous. of bbls.) | 3,948.0 | NA | NA | NA | 3,928.0 | NA |
| Crude Oil (thous. of bbls.) | 3,068.5 | 2,962.6 | -3.5% | 2,907.8 | 3,047.8 | -4.6% |
| Natural Gas (mil. of cu. ft.) | 20,002.0 | 23,908.2 | 19.5% | 22,959.3 | 19,974.8 | 14.9% |
| Coal (thous. short tons) | 1,128.0 | 1,356.0 | 20.2% | 1,495.3 | 914.0 | 63.6% |
| Tourism/Travel | | | | | | |
| Air Passengers (total no. on and off) (S.L. Int'l Airport) | 786,837 | 806,397 | 2.5% | 850,567 | 832,078 | 2.2% |
| Highway Traffic Count Across State Lines | 39,389 | NA | NA | NA | 37,898 | NA |
| Transient Room Taxes (thous. of dol.) | 927.8 | 1,929.3 | 107.9% | 521.4 | 473.3 | 10.2% |
| Visits, State, Nat'l. Parks, Monuments (thous.) | 1,499.4 | 1,406.7 | -6.2% | 1,068.1 | 1,010.7 | 5.7% |
| Utilities | | | | | | |
| Telephone Lines in Service (Mt. Bell) (Residential) | 478,375 | 486,693 | [illegible] | 483,443 | 475,500 | 1.7% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 175,513 | 180,049 | [illegible] | 177,894 | 171,591 | 3.7% |
| Electric Customers (Residential) | 470,750 | 475,395 | 1.0% | 475,214 | 466,620 | 1.8% |
| Electric Customers (Commercial) | 46,677 | 46,649 | -0.1% | 46,380 | 45,815 | 1.2% |
| Natural Gas Customers (Residential & Commercial) | 446,543 | 457,736 | [illegible] | 451,639 | 440,544 | 2.5% |
| Natural Gas Customers (Industrial) | 557 | [illegible] | -2.0% | 549 | 563 | -2.5% |

# Utah Business Statistics

| UTAH DATA | May 1987 | May 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| **Davis County** | | | | | | |
| Non-Ag. Employment (thous.) | 52.7 | 53.0 | 0.6% | 52.3 | 52.8 | -0.9% |
| Unemployment Rate | 5.6 | 3.9 | -30.4% | 5.0 | 5.1 | -1.5% |
| Auth. Permit Construction (thous. of dol.) | 10,135.8 | 11,690.0 | 15.3% | 10,101.6 | 16,355.9 | -38.2% |
| New Dwelling Units (no.) | 115 | 98 | -14.8% | 78 | 179 | -56.8% |
| Postal Receipts (thous. of dol.) | 612.5 | 434.3 | -29.1% | 375.7 | NA | NA |
| Electric Customers (Residential) | 47,220 | 47,928 | 1.5% | 47,731.0 | 46,174.9 | 3.4% |
| Electric Customers (Commercial) | 3,457 | 3,412 | -1.3% | 3,330 | 3,266 | 2.0% |
| Natural Gas Customers (Residential) | 48,784 | 50,170 | 2.8% | 49,422 | 47,525 | 4.0% |
| Natural Gas Customers (Industrial) | 52 | 52 | 0.0% | 52 | 52 | 0.8% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 54,834 | 55,117 | 0.5% | 54,958 | 53,988 | 1.8% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,535 | 11,239 | 6.7% | 10,863 | 10,283 | 5.6% |
| **Salt Lake County** | | | | | | |
| Non-Ag. Employment (thous.) | 333.0 | 338.7 | 1.7% | 335.5 | 331.8 | 1.1% |
| Unemployment Rate | 5.7 | 4.5 | -21.1% | 5.2 | 5.4 | -3.2% |
| Auth. Permit Construction (thous. of dol.) | 43,286.2 | 36,697.5 | -15.2% | 36,317.1 | 51,502.7 | -29.5% |
| New Dwelling Units (no.) | 323 | 225 | -30.3% | 181 | 409 | -55.7% |
| Postal Receipts (thous. of dol.) | 7,140.8 | 8,490.9 | 18.9% | 7,554.3 | 7,083.7 | 6.6% |
| Electric Customers (Residential) | 235,420 | 238,697 | 1.4% | 237,767 | 233,707 | 1.7% |
| Electric Customers (Commercial) | 19,856 | 20,349 | 2.5% | 20,149 | 19,597 | 2.8% |
| Natural Gas Customers (Residential) | 217,830 | 220,632 | 1.3% | 218,506 | 215,019 | 1.6% |
| Natural Gas Customers (Industrial) | 242 | 236 | -2.5% | 235 | 251 | -6.1% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 226,591 | 229,837 | 1.4% | 228,277 | 224,583 | 1.6% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 109,861 | 110,652 | 0.7% | 110,251 | 108,779 | 1.4% |
| **Utah County** | | | | | | |
| Non-Ag. Employment (thous.) | 71.6 | 73.3 | 2.4% | 74.3 | 72.5 | 2.5% |
| Unemployment Rate | 7.4 | 4.2 | -43.2% | 5.7 | 7.2 | -20.7% |
| Auth. Permit Construction (thous. of dol.) | 21,747.1 | 10,484.4 | -51.8% | 10,662.7 | 11,225.7 | -5.0% |
| New Dwelling Units (no.) | 147 | 69 | -53.1% | 68 | 107 | -36.5% |
| Postal Receipts (thous. of dol.) | 953.1 | 1,178.8 | 23.7% | 989.5 | 923.8 | 7.1% |
| Electric Customers (Residential) | 50,677 | 52,611 | 3.8% | 52,703 | 50,171 | 5.0% |
| Electric Customers (Commercial) | 6,524 | 5,955 | -8.7% | 6,076 | 6,296 | -3.5% |
| Natural Gas Customers (Residential) | 59,975 | 61,323 | 2.2% | 60,868 | 59,954 | 1.5% |
| Natural Gas Customers (Industrial) | 68 | 66 | -2.9% | 69 | 70 | -2.3% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 61,148 | 63,620 | 4.0% | 63,420 | 62,218 | 1.9% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 18,667 | 19,817 | 6.2% | 19,315 | 17,068 | 13.2% |
| **Weber County** | | | | | | |
| Non-Ag. Employment (thous.) | 60.6 | 61.5 | 1.5% | 60.9 | 60.3 | 1.0% |
| Unemployment Rate | 7.3 | 5.2 | -28.8% | 6.7 | 6.7 | -1.1% |
| Auth. Permit Construction (thous. of dol.) | 7,762.2 | 4,867.5 | -37.3% | 7,420.1 | 9,163.9 | -19.0% |
| New Dwelling Units (no.) | 84 | 44 | -47.6% | 58 | 74 | -22.3% |
| Postal Receipts (thous. of dol.) | 603.6 | 682.1 | 13.0% | 630.6 | 619.9 | 1.7% |
| Electric Customers (Residential) | 52,652 | 53,412 | 1.4% | 53,159 | 52,300 | 1.6% |
| Electric Customers (Commercial) | 4,822 | 4,898 | 1.6% | 4,889 | 4,778 | 2.3% |
| Natural Gas Customers (Residential) | 49,495 | 49,680 | 0.4% | 49,242 | 48,576 | 1.4% |
| Natural Gas Customers (Industrial) | 86 | 82 | -4.7% | 84 | 86 | -1.4% |
| Telephone Lines in Service (Mt. Bell)(Residential) | 46,004 | 46,473 | 1.0% | 46,116 | 45,628 | 1.1% |
| Telephone Lines in Service (Mt. Bell)(Nonresidential) | 10,947 | 11,881 | 8.5% | 11,357 | 10,671 | 6.4% |

r Revised    fo Forecast    Na Not Available

Sources:

| | |
|---|---|
| Personal Income: | Bureau of Economic Analysis, U.S. Department of Commerce. |
| New Corporations: | Utah Secretary of State. |
| New Car and Truck Sales: | Utah State Tax Commission, Economic and Statistical Unit. |
| Agriculture: | U.S. Department of Agriculture, Agriculture, Utah: Utah Crop and Livestock Reporting Service. |
| Construction Data: | F.W. Dodge Statistics and Utah Construction Report, Bureau of Economic and Business Research. |
| Employment Data: | Utah Department of Employment Security. |
| Savings Information: | Utah Savings and Loan Institutions. |
| Tax Collections: | Utah State Tax Commission. |
| Net Electric Power Utilized: | Cooperating Utah power companies |
| Crude Oil Production: | Area oil refineries. |
| Natural Gas Production: | Utah Department of Oil, Gas, and Mining. |
| Coal Production: | U.S. Department of Energy. |
| Air Passengers: | Salt Lake City International Airport, Statistics Division. |
| Highway Traffic Count: | Utah Department of Transportation. |
| Visits to State and National Parks and Monuments: | U.S. Forest Service, Utah State Parks and Recreation Department. |
| Utilities Data: | Cooperating Utah utility companies. |
| Postal Receipts: | Postmasters in Davis, Salt Lake, Utah and Weber Counties. |

Footnotes:
1 Obtained from F.W. Dodge Statistics.
2 Obtained from Utah Construction Report.
3 Includes services by nonprofit and religious organizations.
4 Includes public schools and college institutions.

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| NATIONAL DATA | May 1987 | May 1988 | % Change From Year Ago | 12 Month Average This Year | 12 Month Average Last Year | 12 Month Average % Change |
|---|---|---|---|---|---|---|
| U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.) | 4,484.2 | 4,819.7 | 7.5% | 4,665.8 | 4,339.5 | 7.5% |
| Total Personal Income (seasonally adjusted) (bil. of dol.) | 3,736.3 | 4,046.0 | 8.3% | 3,903.7 | 3,621.4 | 7.8% |
| Industrial Production Indexes (seasonally adjusted) (1977=100) | 128.2 | 136.1 | 6.2% | 133.0 | 126.0 | 5.6% |
| Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.) | 377.6 | 429.0 | 13.6% | 408.0 | 378.2 | 7.9% |
| Index of Leading Indicators (1967=100) | 188.6 | 191.1 | 1.3% | 191.3 | 183.7 | 4.1% |
| Price Indexes | | | | | | |
| Consumer Price Indexes (not seasonally adjusted) (1982-84=100) | | | | | | |
| CPI-U (All Urban Consumers) All Items | 113.1 | 117.5 | 3.9% | 115.5 | 110.9 | 4.1% |
| CPI-U (All Urban Consumers) Food & Beverages | 113.3 | 117.1 | 3.4% | 115.0 | 111.1 | 3.5% |
| CPI-U (All Urban Consumers) Housing | 113.6 | 117.7 | 3.6% | 116.0 | 112.1 | 3.5% |
| CPI-U (All Urban Consumers) Transportation | 104.7 | 108.1 | 3.2% | 106.9 | 102.2 | 4.6% |
| CPI-U (All Urban Consumers) Medical Care | 129.3 | 137.5 | 6.3% | 133.6 | 125.6 | 6.4% |
| CPI-U (All Urban Consumers) Energy | 87.4 | 88.7 | 1.5% | 89.2 | 85.4 | 4.5% |
| Producer Price Index (not seasonally adjusted) (1982=100) | | | | | | |
| Producer Price Index, All Finished Goods | [illegible] | 107.5 | 2.0% | 106.2 | 103.7 | 2.4% |
| GNP Price Deflator (1982=100) (qtly.) | 117.1 | 120.9 | 3.1% | 119.1 | 115.5 | 3.1% |
| Civilian Employment (seasonally adjusted) | | | | | | |
| Total Civilian Labor Force (mil.) | 119.9 | 120.9 | 0.8% | 120.6 | 118.7 | 1.5% |
| Total Civilian Employment (mil.) | 112.4 | 114.1 | 1.5% | 113.5 | 110.7 | 2.6% |
| Unemployment Rate | 6.3 | 5.6 | -11.1% | 5.8 | 6.8 | -13.8% |
| Construction | | | | | | |
| Total Construction (mil. of dol.) | 22,053.5 | 23,012.9 | 4.4% | 20,728.1 | 19,967.2 | 3.8% |
| Residential | 10,664.1 | 11,004.4 | 3.2% | 9,684.0 | 9,850.5 | -1.7% |
| Nonresidential | 6,970.9 | 6,826.1 | -2.1% | 7,158.6 | 6,656.1 | 7.5% |
| Non-Building | 4,418.5 | 5,182.5 | 17.3% | 3,883.9 | 3,460.6 | 12.2% |
| New Dwelling Units (no.) | 142,575 | 133,730 | -6.2% | 122,507 | 137,705 | -11.0% |
| Interest Rates | | | | | | |
| Short Term (3-month Treasury bill rate) | 5.75 | 6.27 | 9.0% | 5.94 | 5.58 | 6.5% |
| Long Term (30-year Treasury bond yields) | 8.79 | 9.24 | 5.1% | 8.71 | 7.95 | 9.5% |
| Prime Rates Charged by Banks on Short-term Business Loans (ave.) | 8.14 | 8.84 | 8.6% | 8.60 | 7.75 | 11.0% |
| Mortgage Rates (new homes) | 8.99 | 8.59 | -4.4% | 8.86 | 9.34 | -5.2% |

Sources: Business Conditions Digest, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant and Equipment, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

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